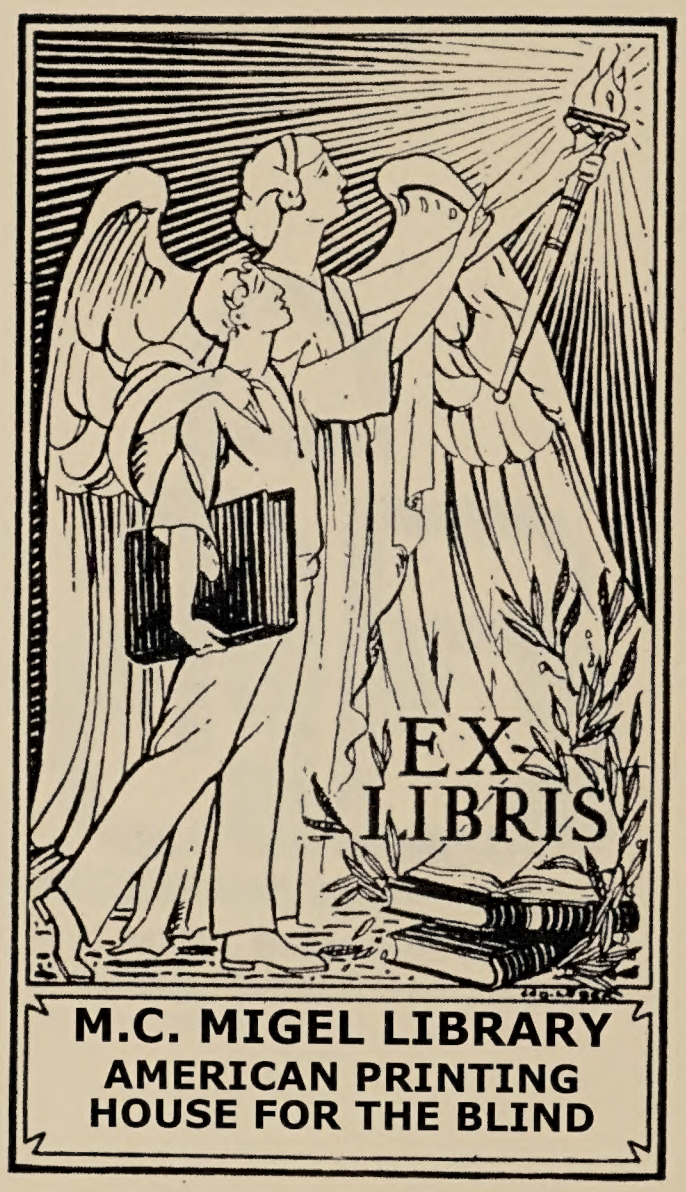

A STUDY OF THE EFFECTIVENESS OF COUNSELING AND PSYCHOLOGICAL TESTING SERVICES FOR "LEGALLY BLIND" ADULTS IN A REHABILITATION SETTING

By Martin Dishart
Bachelor of Science in Social Science, 1950
The College of the City of New York

A dissertation submitted to
The Graduate Council of The George Washington
University in partial satisfaction of the
requirements for the degree of
Doctor of Philosophy

February 1960

Dissertation directed by Mitchell Dreese, Ph.D.,
Professor of Educational Psychology

THE GRADUATE COUNCIL

of

THE GEORGE WASHINGTON UNIVERSITY

announces the

Final Examination

of

MARTIN DISHART

Fellow of the Graduate Council

for the degree of

DOCTOR OF PHILOSOPHY

Thursday, February 11, 1960, at 2:30 P.M.

in

The Dean's Office, Bacon Hall, Room 201

2000 H Street, Northwest

Washington, D. C.

FIELD OF STUDIES: Psychology

DISSERTATION: "A Study of the Effectiveness of Counseling and Psychological Testing Services for 'Legally Blind' Adults in a Rehabilitation Setting"

PROFESSOR IN CHARGE OF THE FELLOW'S RESEARCH:

Mitchell Dreese, *Professor of Educational Psychology*

EXAMINING COMMITTEE:

Frank Mark Weida, *Professor Emeritus of Statistics in Residence*
Thelma Hunt, *Professor of Psychology*
Don Carlos Faith, *Professor of Educational Psychology*
Richard David Walk, *Associate Professor of Psychology*
Eva Mayne Johnson, *Assistant Professor of Psychology*
Paul MacMinn, *Head, Development and Review Unit, Student Loan Section, Division of Higher Education, United States Office of Education*
Joseph Samler, *Assistant Director for Vocational Counseling, Training and Adjustment, Veterans Administration*

Mitchell Dreese, *Professor of Educational Psychology, Advocate*

The Chairman of the Graduate Council, *presiding*

ABSTRACT OF DISSERTATION

A STUDY OF THE EFFECTIVENESS OF COUNSELING AND PSYCHOLOGICAL TESTING SERVICES FOR "LEGALLY BLIND" ADULTS IN A REHABILITATION SETTING

The writer instituted and conducted weekly group, individual, and family counseling services for 60 "legally blind" adults in the Columbia Lighthouse rehabilitation program. He also designed a testing battery and "Psychological Profile" form which he used to test individually 93 blind clients for the District of Columbia and Maryland Departments of Vocational Rehabilitation.

This study evaluated the effectiveness of the services which were conducted for two years. Counseling effectiveness in five "areas of adjustment" was evaluated in questionnaires by each client, his respective Department of Vocational Rehabilitation counselor, and the Lighthouse staff. The five areas were: Emotional Adjustment, Social Abilities, Unwarranted Fears, Nervousness or Depression, Attitudes Regarding Handicap(s), and Vocational Preparation.

Testing services were evaluated by the Lighthouse staff and rehabilitation counselors in terms of the agreement of six "areas of information," in each client's "Psychological Profile," with previously established validity criteria based upon official agency records. The six "areas of information" were: General Intellectual Assessments, Academic Assessments, Manual Dexterity Strengths and Weaknesses, General Personality Assessments, Vocational Assessments and Predictions, and Recommendations.

The major conclusions of this study can be summarized as follows:

1. The three sources of evaluations judged counseling services definitely helpful to the 60 subjects, to an approximately similar degree in the five areas of adjustment. However, the amount of helpfulness could not be reliably determined.

2. Counseling was about equally effective for male and female subjects. But Negro clients thought they were helped more in all areas of adjustment than did the white clients.

3. Subjects with less vision thought they were helped more.

4. A majority of the subjects said group counseling helped the greatest number of adjustment items while individual counseling was the "most valuable." But a large minority thought group counseling was most valuable while 8 per cent picked family counseling. All subjects ascribed helpfulness and value to one or more of the three counseling services.

5. The testing information was in general agreement with both sources of validity criteria. The amount of agreement could not be reliably ascertained. However, there was statistical evidence of relative similarity among the six areas of information.

6. The rehabilitation counselors indicated that the testing information made their vocational counseling "more helpful" to all but about 3 per cent of the 93 subjects.

7. The writer found advantages in the coordination of rehabilitation and psychological services.

BIOGRAPHICAL SKETCH

Born in New York, New York, July 29, 1925
B.S. 1950, College of the City of New York
Counter-Intelligence Agent, U. S. Army in Germany, 1946–1948
Director of commercial business, 1948–1955
Researchist, McCann-Erickson, 1955–1956
Assistant Educational Counselor, College of General Studies, The George Washington University, 1956–1957
Psychologist, 1957–1959; Director of Psychological Service, 1959– , Columbia Lighthouse for the Blind

CONCERNING PERIOD OF PREPARATION AND COUNCIL FELLOWSHIP EXAMINATION

CONSULTATIVE COMMITTEE:

Mitchell Dreese, *Professor of Educational Psychology, Chairman*
Thelma Hunt, *Professor of Psychology*
Don Carlos Faith, *Professor of Educational Psychology*
Curtis Edward Tuthill, *Associate Professor of Psychology*

LANGUAGE REQUIREMENTS:

French passed: April 29, 1957
German passed: June 16, 1958

FIELDS OF STUDY:

Counseling Psychology
Psychological Measurements
Clinical-Abnormal Psychology
Rehabilitation Counseling
General Psychology

TIME IN PREPARATION: May 1957–June 1959

COUNCIL FELLOWSHIP EXAMINATION PASSED: June 1959

BIBLIOGRAPHY

Johnson, J. Arthur and Dishart, Martin, "Letting the Client Judge," *New Outlook for the Blind*, 52 (No. 3): 75–77 (March 1958).

Dishart, Martin, "Psychological Profile Form for the Blind," 12 pp., published by the author, Washington, D. C. (1958).

Dishart, Martin, "Psychological Profile, General Form," 4 pp., published by the author, Washington, D. C. (1958).

Dishart, Martin, "Testing the Blind for Rehabilitation Using a Psychological Profile," *New Outlook for the Blind*, 53 (No. 1): 1–14 (January 1959).

PREFACE

This study has been made possible through the cooperative interest and help of many people from several agencies.

First acknowledgment is made to the 60 blind counseling subjects in this study who contributed their time to answer the questionnaire.

Mr. J. Arthur Johnson, Executive Director of the Columbia Lighthouse for the Blind made available the personnel, time and facilities which made this study possible. The rehabilitation and evaluation staff at the Lighthouse contributed their time, knowledge, and professional help.

The directors, supervisors, and rehabilitation counselors for the blind at the District of Columbia and Maryland Departments of Vocational Rehabilitation did everything possible to help this project.

The American Foundation for the Blind contributed professional advice and the use of their wonderful reference library.

The Psychological Corporation contributed professional consultation for the compilation of the test battery and the "Psychological Profile."

[illegible]

[illegible]

[illegible]

Special acknowledgment is made to Dr. Frank Mark Weida, Professor Emeritus of Statistics, whose invaluable consultations for all the statistics in this study provided the writer with a better understanding of the results.

The writer wishes to express his deep appreciation to Dean Mitchell Dreese, his Master in Research, whose helpfulness included knowledge, experience, and the sincere personal interest of a wise teacher.

TABLE OF CONTENTS

LIST OF TABLES

Table | Page

CHAPTER I

PURPOSE OF THE STUDY

How it Began

Suppose the director of a rehabilitation center--say one for the blind--said, "All right! Let's have psychological services."

"We've never had any before; but we want them now. I know we need testing; and I'm pretty sure we could use some counseling services. But it's up to you to obtain or develop and set up the best available services, considering our limited funds, and to do so as soon as possible. It will also be up to you to coordinate such services with our training staff and each client's state-federal rehabilitation counselor as part of the existing vocational rehabilitation program. I'm in favor of having research to evaluate such psychological services. But remember that research must never displace or subordinate services to a single client. Our clients come first."

The above was said, in effect, to this writer. The rehabilitation center was the Columbia Lighthouse for the Blind in Washington, D. C. The state-federal vocational rehabilitation counselors were from the District of Columbia and Maryland Departments of Vocational Rehabilitation.

An additional stipulation was made. All programs, procedures, and services of this writer had to meet with the approval of the director and consultant psychiatrists and psychologists of the District of Columbia and Maryland Departments of Vocational Rehabilitation as well as the director and board members of the Columbia Lighthouse.

A program of psychological services was developed which included: psychological testing and evaluation of clients, weekly individual counseling, weekly group counseling, group counseling for the relatives of clients, and the coordination of all psychological services with each client's total rehabilitation program.

These services have now been in effect for more than two years. Since that time reprints of an article[1] describing this writer's testing program have been sent to over 600 service agencies for the blind, state departments of vocational rehabilitation, university counselor training programs, and foreign embassies. Correspondence from many, and requests for the "Psychological Profile Form for the Blind" by 39 agencies and universities, included experts in the field of rehabilitation.

Counseling services, from the very beginning, not only met with the approval of the clients but were expanded at their request.[2]

---

[1]Martin Dishart, "Testing the Blind for Rehabilitation Using a Psychological Profile," New Outlook for the Blind, Vol. 53, No. 1(January, 1959), pp. 1-14.

[2]J. Arthur Johnson and Martin Dishart, "Letting the Client Judge," New Outlook for the Blind, Vol. 52, No. 3 (March, 1958), pp. 75-77.

The directors, staffs, and consultants involved have all expressed complete satisfaction and approval of the services. Everyone was satisfied to continue the services which "seem to be helpful"; everyone, that is, except this writer.

Reasons for the Study

This writer feels that services which "seem to be helpful" have actually been evaluated, but only insofar as agency directors, staffs, and consultants were able to judge over-all effects. The writer does not believe such evaluations are sufficient bases to continue services or to understand the effects of such services.

How many clients have been helped? What helped them? How were they helped; in what areas and by which services? Did sex, race, or degree of blindness make a difference? What do the clients think about the helpfulness of their services? How does the effectiveness of each psychological service compare with the available validity criteria for each client?

These are only a few of the evaluation questions which this study will attempt to answer.

The Study

This study will describe two types of psychological services and evaluate them according to three different sources of evaluations. All evaluation criteria will be based upon the extent to which the respective services were helpful

to each blind client. Detailed descriptions of each service are included in Chapter IV on "Procedures."

Counseling services included weekly individual counseling for each client, weekly group counseling for each client, and group couseling for the relatives of each client. Sources of evaluation were: each respective client, the Columbia Lighthouse staff evaluating as a professional team, and each client's respective Department of Vocational Rehabilitation counselor. All three sources evaluated the same five areas of adjustment, each containing five specific facets.

Testing services evaluated were in six categories containing 24 predictive items about each client as indicated in his "Psychological Profile"[3] which was based upon six hours of testing prior to the rehabilitation program. Sources of evaluation were the Columbia Lighthouse staff comparing the 24 items with the same type of information in their final reports which were based on ten weeks of evaluation, and each client's vocational rehabilitation counselor comparing the six categories with his case records and information about the client since the rehabilitation program.

Thus for counseling: the respective client, vocational rehabilitation counselor, and Lighthouse staff all evaluated the effects of counseling services on each client.

For testing: the Lighthouse staff indicated the extent to which the Psychological Profile predicted their

---

[3]Martin Dishart, Psychological Profile Form for the Blind (Washington, D. C: by the author, 1956).

findings for 24 items after ten weeks of evaluation. The counselor indicated the extent to which the Profile's predictions agreed with his final case records for the same 24 items in six categories.

The Problem

The problem in this study is to evaluate what good the services did--for the clients. Since there is no reason to assume that services designed to do good could not do harm, the problem will also include an evaluation of any harm it did to the clients.

The "good" or "harm" evaluated for counseling will be for actual items and areas of adjustment for each client. The "good" or "harm" evaluated for testing services will be in terms of the agreement of 24 items of information with previously established validity criteria.

There are three sources of evaluations in this study: the respective clients, the Columbia Lighthouse staff and their official records, and the respective Department of Vocational Rehabilitation counselors and their official records.

Counseling was evaluated by the respective clients, Lighthouse staff, and rehabilitation counselors, all evaluating the same items.

Testing was evaluated by the Lighthouse staff and rehabilitation counselors, evaluating the same items.

CHAPTER II

BACKGROUND AND PREVIOUS RESEARCH PERTAINING TO COUNSELING METHODS USED IN THIS STUDY

The objective of any counseling service is to provide maximal help to the client. No good counselor would ever preclude part of his services because it falls outside of a particular definition of counseling. On the other hand it is important for any counselor to know as much as possible about why fellow human beings are now his clients and what services his clients and agency expect of him. The role of this writer as a counselor was facilitated by a clear-cut understanding regarding such matters.

All clients at the Columbia Lighthouse for the Blind are "legally blind" adults. In keeping with P. L. 565[1] which supports Lighthouse services, all clients are potentially employable but are presently unemployed because of the handicaps imposed by their disabilities. They all receive a comprehensive rehabilitation program for from 8 to 12 weeks. Then they are expected to take whatever step is next toward gainful employment.

---

[1]U. S., Congress, "Vocational Rehabilitation Amendments of 1954," Public Law 565, 83rd Congress.

The job of this counselor was to make available regular counseling services to help each client get as much as possible out of his rehabilitation program. Such counseling was called "adjustment counseling," quite arbitrarily but mostly, because it was descriptive and the least confusing with "vocational rehabilitation counseling" or psychotherapeutic counseling. However, it was fully recognized that any adjustment counseling can have "therapeutic" values for certain clients and that vocational counseling would necessarily be included for many. The actual determinants of counseling areas were the needs of each client, whether they fell in personal, vocational, educational, or any other areas. However, for the most part, clients talked about their various adjustments--in the Lighthouse program, at home, or in their social community. These were not adjustments as blind people but rather as people in their efforts to do what they wanted to do, feel as they wanted to feel, and relate as they wanted to relate. Blindness was generally only one facet of problem areas dealt with in counseling; but often the extra weight of that facet was sufficient to make the total problem seem unbearable. In such cases, many clients sought counseling relief and better ability to deal with the personal, situational, interpersonal, vocational, self-concept, or other aspects of their problems.

However, the aspects dealt with were always readily accessible and conscious. No attempts were made to probe

the subconscious; nor were symbolisms interpreted. Limited time, and the nature of this counseling, could only deal with that which the client was presently ready to express and perceive. Frequently it included a client's remembered childhood experiences, which he spontaneously recalled and wanted to talk about. But it was felt that symbolisms, subconscious repressions, and personality restructuring were at a level of psychotherapy which require skills and time beyond the scope of these services. Several clients were referred to the Department of Vocational Rehabilitation psychiatrist for such psychotherapy. But the objective of this counselor was aimed at helping each client to get as much as possible out of his present rehabilitation training situation.

This counselor tried at all times to be eclectic in his methodology, not as an escape from the responsibility for any one "system" but rather as an attempt to use the best available for his counselees. Unfortunately, relatively little has been published about the counseling of blind people. But, and of much greater importance, a wealth of information has been written about the group and individual counseling of people.

The following review of pertinent information by authorities in counseling is presented as the framework within which this counselor's eclectic approach was, and is being, built.

General Considerations in Counseling

One of the key points in counseling the blind is the question of whether such services should be different from those offered the sighted. Is there a psychology for the blind? Dabelstein[2] answered this very clearly when he said:

> . . . the blind are typical human beings, that the same psychological principles influence their behavior as the sighted, that they have much in common with the sighted and consequently respond equally effectively to the techniques and methods developed for use with the sighted.[3]

Routh[4] stressed the importance of recognizing individual differences and dealing with the "whole man." Like Dabelstein, Routh maintained:

> In dealing with the blind counselee, to a very large extent, the manner and method of approach is not one bit different from that to be adopted for a nonhandicapped person.[5]

However, it should be recognized that even though the same basic counseling principles which apply to the sighted also apply to the blind, it is still usually advantageous and

---

[2]Donald H. Dabelstein, "Vocational Diagnosis and Counseling," Proceedings of the 21st Convention, American Association of Workers for the Blind (New York: American Association of Workers for the Blind, 1947), pp. 34-40.

[3]Ibid., p. 37.

[4]Thomas A. Routh, "Counseling the Blind," Outlook for the Blind, Vol. 42, No. 10 (December, 1948), pp. 295-99.

[5]Ibid., p. 298.

often essential for counselors of blind clients to know the facts about the disability and to understand the range of its possible handicaps. Voorhees[6] would not only make such understanding a counselor's qualification, but would also have the understanding include empathy. Lowenfeld[7] would have the psychologist know such special factors of blindness as a qualification for testing as well as counseling.

The literature includes French and Russian studies which examine differences in the blind, as a group, on a perceptual basis. Boutonier[8] said that blindness affects fears and anxieties in that it crystallizes the emotions around auditory and tactual perceptions with resultant greater insecurity because the blind person has more trouble overcoming fears against which sight would protect him. This writer disagrees and believes that irrational fear is based on lacking insight or an insecure self-picture, not lacking vision; vision is not necessary for insight or a secure self-picture.

This writer would also place little importance, for counseling considerations, upon other physical limitations

---

[6]Arthur L. Voorhees, "Counseling the Blind," Vocational Guidance Quarterly, Vol. 3, No. 2 (Winter, 1954-55), pp. 55-57.

[7]Berthold Lowenfeld, "The Blind," Psychological Aspects of Blindness, Rehabilitation Service Series No. 210 (Washington, D. C.: Dept. of HEW, Office of Vocational Rehabilitation, 1953), pp. 179-95.

[8]J. and Henri P. Boutonier, "La Peur et l'angoisse chez les enfants et les adolescents aveugles" (Fear and Anxiety in Blind Children and Adolescents), Journal de Psychologie, 39 (July-Sept., 1946), pp. 341-49.

found in the blind such as the reduced ability to mimic.[9] It would seem that such limitations are the results of, rather than the cause of, psychological difficulties.

Cutsforth[10] asserted:

> Without further discussion the rather dogmatic conclusion must be stated that the disability and incapacitation so commonly found among the blind have their origin not in the physical condition, but in the impact of the individual upon society and its attitudes. In other words, society, with its preconceived attitudes, can induce the neurotic personalities it feels to be inherent in particular groups.[11]

Fiske[12], Fries[13], Wilson[14], and Rawls[15] show the same possibilities of psychological difficulties for the blind caused by social pressures and attitudes while Witters[16] would even ascribe mental retardation in blind

---

[9]N. N. Nishchenko, "Peculiarities of Voluntary Movements of the Facial Muscles of Blind People," Sovetskaia Neuropatologia, No. 7 (1935), pp. 121-32.

[10]Thomas D. Cutsforth, "Personality and Social Adjustment Among the Blind," Blindness, ed. Paul A. Zahl (New Jersey: Princeton University Press, 1950), pp. 174-87.

[11]Ibid., p. 175.

[12]Marjorie Fiske, "Blindness a Psychological Problem," Teachers Forum, 9 (1937), pp. 47-55.

[13]Emil Fries, "The Social Psychology of Blindness," Journal of Abnormal and Social Psychology, Vol. 25, No. 1 (April-June, 1930).

[14]J. F. Wilson, "Adjustments to Blindness," British Journal of Psychology, 38 (1948), pp. 212-26.

[15]Horace D. Rawls, "Cultural Factors in Disability," New Outlook for the Blind, Vol. 51, No. 3 (March, 1957), pp. 87-92.

[16]Frederick Witters, "Psychotherapie in der Bildungsarbeit an blinden, sehbehinderten und sehgefährdeten Kindern," Der Blindenfreund, Vol. 71, No. 6 (November-December, 1951), pp. 183-85.

children to emotional difficulties rather than limited capacities.

There seems widespread agreement among authorities that the major handicaps of blindness are psychological in nature. This, of course, is a prime point in the consideration of any counseling services for the blind. If psychological maladjustment, and not the lacking vision itself, causes the major handicap, then adjustment counseling can be a major factor in handicap-reduction and rehabilitation.

In her study at state agencies for vocational guidance, Bauman[17] equated 300 blind, non-blind, and sighted - disabled adults for personality tests and evaluations. She concluded:

> The personality pattern of the handicapped groups is based largely on the social and economic consequences of their handicap rather than upon the direct impact of the physical defect upon the personality, and differs from the normal pattern in degree rather than kind.[18]

This is in keeping with the view of Block[19] that

---

[17]Mary E. Bauman, "A Comparative Study of Personality Factors in Blind, Other-Handicapped, and Non-Handicapped Individuals," Rehabilitation Service Series No. 134 (mimeographed) (Washington, D.C.: Office of Vocational Rehabilitation, 1950).

[18]Ibid.

[19]William E. Block, "Operational Principles for Counseling the Disabled," Journal of Counseling Psychology, Vol. 2, No. 4 (Winter, 1955), pp. 256-63.

> Often the most pressing problems of the patient arise not from the disability itself, but from its psychological and social-psychological ramifications.[20]

Fletcher[21] went further in saying that physical disabilities are generally accompanied by some degree of mental disability. Chevigny[22] agreed with the views of Cutsforth when he said that the environment more often than not succeeds in creating out of the blind individual precisely what its stereotypic picture about the blind holds. But Chevigny optimistically believes the newly blinded can readjust in as little as six weeks if properly aided.

One of the main considerations in counseling within a rehabilitation setting is that such services should not be isolated. Dabelstein[23] made it clear that:

> Counseling in vocational rehabilitation of the blind is not a single act but a continuing process

---

[20] Ibid., p. 256.

[21] Frank M. Fletcher, "Symposium on Rehabilitation Counseling: the Role of Counseling Psychology in Rehabilitation," Journal of Counseling Psychology, Vol. 1, No. 4 (Winter, 1954), pp. 240-43.

[22] Hector Chevigny, "The Adjustment of the Blind," Transactions of the New York Academy of Sciences, Series II, Vol. 13, No. 6 (April, 1951), pp. 233-38.

[23] Donald H. Dabelstein, "Vocational Rehabilitation of the Blind," Blindness, ed. Paul A. Zahl (New Jersey: Princeton University Press, 1950), pp. 191-205.

> that binds all of the other services into an organized coordinated plan in terms of the needs and characteristics of each blind individual.[24]

Jacobs[25] stressed the individuality aspects of rehabilitation while Hamilton[26] presented a "wheel concept" of integrated and coordinated medical, psychosocial, and vocational services. Kessler[27] also believes in teamwork but stresses maximal physical restoration as a prior condition to full benefit from counseling or other rehabilitation services.

In discussing psychological services in vocational rehabilitation, DiMichael[28] emphasized the importance of coordinating counseling with other services for the efficient helping of clients and also because of frequent difficulties in delimiting services. He noted, in 1959, that:

> A precise differentiation between counseling and psychotherapy is widely recognized as incapable of being drawn at this stage of development.[29]

---

[24] Ibid., p. 198.

[25] Abraham Jacobs, "Vocational Rehabilitation of the Blind," New Outlook for the Blind, Vol. 51, No. 7 (September, 1957), pp. 286-92.

[26] Kenneth W. Hamilton, Counseling the Handicapped in the Rehabilitation Process (New York: Ronald Press, 1950).

[27] Henry H. Kessler, Rehabilitation of the Physically Handicapped (New York: Columbia University Press, 1953).

[28] Salvatore G. DiMichael, Psychological Services in Vocational Rehabilitation (Washington, D.C.: Department of HEW, Office of Vocational Rehabilitation, 1959).

[29] Ibid., p. 7.

He pointed out that William C. Menninger[30] noted the same difficulty from the psychiatrist's point of view.

As a means of meeting the needs for a coordinated team approach, to maximally utilize psychological services, this writer had weekly "psychological staff conferences" with the Lighthouse staff where each case was discussed by the supervisor, psychologist and each staff member. Similar conferences were held periodically, although not regularly, between this psychologist and each client's Department of Vocational Rehabilitation counselor. These staff conferences included the discussion of all pertinent services. That such coordination procedures for psychological services are especially necessary in a center for the blind is corroborated by Redkey's 1959 statement[31] that:

> The most obvious difference between centers for the blind and general centers is the primary focus of the former on solution of what might be broadly described as adjustment problems rather than medical problems.[32]

Special Considerations Concerning Blindness

There are more than 350,000 "legally blind" people in the United States today, or about 2 per 1,000.

---

[30] William C. Menninger, "The Relationship of Clinical Psychology and Psychiatry," American Psychologist, 5 (January, 1950), pp. 3-15.

[31] Henry Redkey, Rehabilitation Centers Today, Rehabilitation Service Series No. 490 (Washington, D. C.: Office of Vocational Rehabilitation, 1959).

[32] Ibid., p. 85.

This includes those who are totally blind and those who have some residual vision according to the following formula published by the Veterans Administration and the American Medical Association:

> Central visual acuity of 20/200 or less in the better eye with corrective glasses, or central vision acuity of more than 20/200, if there is a field defect in which the peripheral field has contracted to such an extent that the widest diameter of visual field subtends an angular distance no greater than 20 degrees in the better eye.[33]

The rate of blindness in the area of Washington, D. C., where this study was conducted, is about 2.91 per 1,000 population[34], one of the highest rates in the nation.

Although historically the blind have been attributed with compensatory acuteness in other senses, many studies, such as those described by Mary Bauman[35] and Vilma

---

[33] Russell C. Williams and Maxwell D. Flank, "Therapy for the Newly Blinded, as Practiced with Veterans," Journal of the American Medical Association, Vol. 158 (July 9, 1955), p. 1.

[34] "Statistical Tables of a Survey of the Community Services and Facilities Available to the Blind Residents of Washington, D. C., Montgomery County, Md. and Prince Georges County, Md." (American Foundation for the Blind, April, 1956).

[35] Mary K. Bauman, Adjustment to Blindness (Harrisburg, Pa.: State Council for the Blind, Commonwealth of Pennsylvania, 1954).

Donahue,[36] clearly show such ideas to be fallacious. Not only isn't there sensory compensation, but some sensory judgmental abilities diminish because of missing vision. Even 'facial vision,' the ability to perceive objects without using vision, has been experimentally demonstrated to be dependent upon auditory and/or other subtle cues which can be utilized by blindfolded sighted as well as blind subjects.[37]

The difficulty which any severely disabled person finds in accepting his disability, because of his disrupted "body image," was pointed out by Routh,[38] and Masterman.[39] This factor, the acceptance of one's blindness, was called by the late Dr. Cholden,[40] "one of the gravest stumbling blocks in the process of rehabilitation after the loss of

---

[36] Wilma Donahue, 'Needs and Developments in Psychological Research for the Blind,' Psychological Diagnosis and Counseling of the Adult Blind, Proceedings of the University of Michigan Conference for the Blind, 1947 (New York: American Foundation for the Blind, 1950), pp. 154-69.

[37] Rudolf Pintner, Jon Eisenson, and Mildred Stanton, The Psychology of the Physically Handicapped (New York: Crofts & Co., 1941), Chap. VII, 'The Blind,' pp. 207-51; Carol H. Ammons, Philip Worchel, and Karl N. Dallenbach, "'Facial Vision': the Perception of Obstacles Out of Doors by Blindfolded and Blindfolded-deafened Subjects," American Journal of Psychology, Vol. 66, No. 4 (October, 1953), pp. 519-53.

[38] Thomas A. Routh, 'Body Image in Counseling the Handicapped," Vocational Guidance Quarterly, Vol. 7, No. 2 (Winter, 1958-59), pp. 127-30.

[39] Louis E. Masterman, 'Some Psychological Aspects of Rehabilitation," Journal of Rehabilitation, Vol. 24, No. 4 (July-August, 1958), pp. 4-6.

[40] Louis S. Cholden, A Psychiatrist Works With Blindness (New York: American Foundation for the Blind, 1958).

vision." He vividly described the stages of depression as "shock", lasting from a few days to weeks, followed by "reactive depression." Cholden believed that the blind person had to go through this period of "mourning" for the lost vision before rehabilitation could be effected. Blank[41] made the same point but emphasized that it applied to the blinded adult while psychological problems of the congenitally blind were largely due to "distorted parent-child interactions." He said that while congenital blindness doesn't always cause ego defect or personality disorder, acquired blindness usually does because it disrupts established patterns of communications and feelings about oneself. Bauman[42] presented the importance of agreement of the "self-concept" with reality while Dover[43] pointed out that newly blinded people do not necessarily go through any set of outlined stages, and that the order or degree of stages will vary with the individual.

---

[41] H. Robert Blank, "Psychoanalysis and Blindness," Psychoanalytic Quarterly, Vol. 26, No. 1 (January, 1957), pp. 1-24.

[42] Mary K. Bauman, "The Initial Psychological Reaction to Blindness," New Outlook for the Blind, Vol. 53, No. 5 (May, 1959), pp. 165-69.

[43] Frances T. Dover, "Readjusting to the Onset of Blindness," Social Casework, Vol. 40, No. 6 (June, 1959), pp. 334-38.

Voorhees[44] sent questionnaires to 750 blind people in the United States. Of the 340 who replied, 47% said that at least once a day they wish their sight were restored, and 32% thought many people avoided them because they were blind. But 51% said that "blindness is in some ways a blessing" and 67% thought there are worse disabilities.

Lokshin[45] described the special difficulties of blindness for the older person, noting that blindness may be complicated by anxiety and questions about self-worth which are actually related to aging and diminished sexual powers.

Speaking of blindness in a military setting, Gowman[46] said that:

> As a disability, blindness ranks at or near the top in prestige value. It is more romantic and less disfiguring than lameness or amputation; it is more serious and far less often the subject of humor than is deafness.[47]

Fitting[48] noted the advantages of separate rehabilitation centers for the war blind. Himes[49] pointed out that the

---

[44]Arthur L. Voorhees, "Attitudes of the Blind toward Blindness," Proceedings of the 23rd Convention, American Association of Workers for the Blind (New York: American Association of Workers for the Blind, July, 1949), pp. 65-67.

[45]Helen Lokshin, "Psychological Factors in Casework with Blind Older Persons," New Outlook for the Blind, Vol. 51, No. 1 (January, 1957), pp. 1-8.

[46]Alan G. Gowman, The War Blind in American Social Structure (N.Y.: American Foundation for the Blind, 1957).

[47]Ibid., p. 13.

[48]Edward A. Fitting, Evaluation of Adjustment to Blindness (Research Series No. 2; N.Y.: American Foundation for the Blind, 1954).

[49]Joseph S. Himes, "Changing Attitudes of the Public toward the Blind," New Outlook for the Blind, Vol. 52, No. 9 (November, 1958), pp. 330-35.

blinded veterans of World War II helped change many attitudes of the public and developed a "new social consciousness" toward the blind.

Counseling Approaches

Hahn and MacLean[50] believe it is important to distinguish counseling from psychotherapy.

> Usually no major and drastic restructuring of personality is sought by either counselor or client. In contrast, psychotherapy is frequently concerned with major personality restructuring.[51]

But Patterson[52] said there is no difference in the methods and techniques used in "counseling" and "psychotherapy" and used the terms interchangeably. Patterson[53] believes that emotionalized attitudes and concepts can only change as the client is able to develop a different perception of himself and his environment. Therefore, the focus should not be upon how the counselor perceives the client, but upon how the client perceives himself. The late Annette Garrett's[54]

---

[50]Milton E. Hahn and Malcolm S. Maclean, Counseling Psychology (New York: McGraw-Hill, 1955).

[51]Ibid., p. 249.

[52]C. H. Patterson, Counseling and Psychotherapy: Theory and Practice (New York: Harper & Bros., 1959).

[53]C. H. Patterson, Counseling the Emotionally Disturbed (New York: Harper, 1958).

[54]Annette Garrett, Interviewing: Its Principles and Methods (New York: Family Welfare Association of America, 1942).

basic counseling approach of "starting where the client is" follows the same principle.

In speaking of adjustment counseling for the blind, Routh[55] favors the client-centered approach of Carl Rogers; especially the counselor's ability to "receive the client as he is" and to accept each facet which he presents.[56]

An interesting point is made by Grater[57] who cautions counselors against as relating to their clients that they have to talk dramatically to please the counselor. Faries[58] said that the expression of hostility toward counseling can be a necessary step in the direction of improvement for the client.

Erickson's[59] characteristics of a "good counselor" includes the ability to skillfully "shift gears" from one method to another depending upon client needs and counselor

---

[55]Thomas A. Routh, "Adjustment Counseling" American Journal of Occupational Therapy, Vol. II, No. 6 (November-December, 1957), pp. 320-21, 337, 338.

[56]Carl Rogers, "The Characteristics of a Helping Relationship," Personnel and Guidance Journal, Vol. 37, No. 1 (September, 1958), pp. 6-16.

[57]Harry A. Grater, "When Counseling Success is Failure," Personnel and Guidance Journal, Vol. 37, No. 3 (November, 1958), pp. 223-25.

[58]Miriam Faries, "Hostility in Short-Term Counseling," Personnel and Guidance Journal, Vol. 36, No. 9 (May, 1958), pp. 627-28.

[59]Clifford E. Erickson, The Counseling Interview (New York: Prentice-Hall, 1950).

abilities; he also includes continual professional growth by the counselor. Hahn and MacLean[60] have the same approach in saying that "counselors must search out all the angles of a counselee's problem and use all pertinent tools and techniques in its solution." Salvatore DiMichael[61] extended this eclectic approach to counseling the blind when he said, "It will always be necessary to apply the scientific knowledge gained in terms of its effect, not upon the blind group, but upon the individual who is being counseled." He further elaborated:

> We also find that there are variations in counseling approaches, each variation claiming that it is the best. When you come to the question of which is proper, which has proved its value, the only evidence literature gives us is that personal experience of the office is the only basis upon which you can establish the superiority of one or the other.[62]

Group Counseling

Counseling services at the Columbia Lighthouse for the Blind included weekly group counseling. The basic objective was the same as for the weekly individual counseling:

---

[60]Milton E. Hahn and Malcolm S. MacLean, General Clinical Counseling in Educational Institutions (New York: McGraw-Hill, 1950), p. 57.

[61]Salvatore DiMichael, "Vocational Counseling of the Adult Blind," Psychological Diagnosis and Counseling of the Adult Blind, Proceedings of the University of Michigan Conference for the Blind, 1947 (New York: American Foundation for the Blind, 1950), Chapter 11, pp. 137-53.

[62]Ibid., p. 153.

to help each client get as much as possible out of his rehabilitation program. However, even more than for individual counseling, the group counseling experience was found to supplement as well as to help facilitate the rest of the program. Living with oneself and others while in a group was more intensive in counseling than in the classes. The focus of attention was people and their feelings rather than how to do things.

This counselor has always felt that group counseling and individual counseling are both supplementary and complementary services. Some clients can benefit more from one or the other, but most clients -- within the 'normal' range of adjustment problems -- can benefit from each. Group and individual counseling offer different milieu in which the client can see himself and be seen. In turn, the counselor who conducts both kinds of counseling will have a wider range of information with which to help each client.

There are many differences between group and individual counseling which will be mentioned in the following references. But the most important one in this study was the influence of blind peers in the group. Some clients found it easier to talk among their peers; others found it more difficult or threatening. Many found that the sharing of feelings in such a group, the opportunities to help as well as to be helped, and the reality factor of being censured as well as being able to censure, could offer unique

learning possibilities. And here too, perhaps for the first time, blindness was a common factor. Only in such a setting could many learn about individual differences! Details about the groups, as well as clients' evaluations of its merits, will be given in a later chapter.

In the following references the contributions of group psychotherapy and group psychoanalysis will be included insofar as they have something to offer to the group counseling in this study.

Like Lehner and Kube[63], Hobbs believes that psychotherapy is a learning or relearning situation. He called group psychotherapy a special learning situation in that:

> As a member of a group, the person learns what it means to give and receive emotional support and understanding in a new and more mature fashion.[64]

Compared to individual therapy:

> It is one thing to be understood and accepted by a therapist, it is a considerably more potent experience to be understood and accepted by several people who are also honestly sharing their feelings in a joint search for a more satisfying way of life. More than anything else, this is the something added that makes group therapy a qualitatively different experience from individual therapy.[65]

---

[63]George F. Lehner and Ella Kube, The Dynamics of Personal Adjustment (Englewood Cliffs, N. J.: Prentice-Hall, 1955).

[64]Nicholas Hobbs, "Group-Centered Psychotherapy," Client-Centered Therapy (Boston: Houghton Mifflin Co., 1951), p. 291.

[65]Ibid., p. 287.

Spotnitz[66] pointed out that clients in group therapy learn to control their impulses as a result of emotional interactions and actual "feeling out" of conflicts rather than as a result of verbalizing and the conscious recognition of impulses. He believes the repeated group interactions result in growth and improved functioning.

Driver[67] discussed relatively short-term group counseling in various settings and Foulkes[68] presented the relatively deeper level psychoanalytic approach to group therapy. But it is the late Dr. Cholden who published one of the very few accounts of group therapy in a rehabilitation center for the blind.[69] Cholden's paper is the only reference which includes details of group counseling methods with blind clients. He also gave actual contents of his sessions with a group of eight clients who were very typical of groups at the Lighthouse. He said the group therapy experiences must be considered as an important learning situation in which participants learn to express their feelings with greater freedom.

---

[66]Hyman Spotnitz, "Group Therapy as a Specialized Psychotherapeutic Technique," Specialized Techniques in Psychotherapy, ed. Gustav Bychowski (New York: Grove Press, 1952).

[67]Helen I. Driver, Counseling and Learning Through Small-Group Discussion (Madison, Wisconsin: Monona Publications, 1958).

[68]S. H. Foulkes and E. J. Anthony, Group Psychotherapy (London: Penguin Books Ltd., 1957).

[69]Louis Cholden, "Group Therapy with the Blind," Group Psychotherapy, Vol. 6, No. 1-2 (May-August, 1953), pp. 21-29.

They learn of the normalcy of their problems, of the methods used by others in handling emotional problems, and often become aware of their own methods of dealing with their emotions. Also:

> The participant learns that exposing himself to his fellows does not hold the threat and danger he has anticipated. He further receives the benefits of feeling he belongs to a group which, in itself, holds important meanings in terms of growth and personal development.[70]

Wright[71] listed the advantages and disadvantages of "multiple counseling" in a school setting; however, most of the disadvantages listed would result only from trying to use group counseling without individual counseling. Hewer[72] used a sample of 93 students to study the relative effectiveness of group and individual counseling in aiding realistic vocational choices. Because of inconsistent ratings among judges, no conclusions of relative effectiveness could be drawn. Conrad[73] discussed the development of a group counseling program in a family service agency and concluded that certain

---

[70] Ibid., p. 6.

[71] Wayne E. Wright, "Multiple Counseling: Why? When? How?" Personnel and Guidance Journal, Vol. 37, No. 8 (April, 1959), pp. 551-57.

[72] Vivian H. Hewer, "Group Counseling, Individual Counseling, and a College Class in Vocations," Personnel and Guidance Journal, Vol. 37, No. 9 (May, 1959), pp. 660-65.

[73] Gertrude J. Conrad, "Development of a Group Counseling Program in a Family Service Agency," Social Casework, Vol. 39, No. 10 (December, 1958), pp. 560-64.

things can be achieved within a group that cannot take place in individual counseling. Bennett[74] summed up this point in saying:

> One point of common agreement among the various approaches is that group therapy is not a substitute for individual therapy but makes its own unique contributions to therapeutic services.[75]

Hadley[76] pointed out that not only has the term "group counseling" been applied to everything from meetings with 500 people to group psychoanalysis with two patients, but that there are about as many specific approaches to group work as there are people who use them. He believes that group psychotherapy is promising for the future of counseling but deplores the lack of adequate evaluation criteria and studies.

Bach[77] believes that successful group therapy must be group- and client-centered rather than authoritarian. However, in addition, there should be available "group-centered individual sessions" where clients can "bring into focus new perceptions and insights gained in the group." Bach believes it is advantageous to have the same person conduct group and

---

[74]Margaret E. Bennett, Guidance in Groups (New York: McGraw-Hill, 1955).

[75]Ibid., p. 219.

[76]John M. Hadley, "Group Counseling and Therapy," Chapter 10 of Clinical and Counseling Psychology (New York: Alfred Knopf, 1958), pp. 227-48.

[77]George R. Bach, Intensive Group Psychotherapy (New York: Ronald Press, 1954).

individual therapy. Slavson[78] also made this point. He outlined procedures of four types of group therapy: "activity," "interview," "relationship" and "didactic."[79] However Slavson's cases were mostly at personality restructuring or psychiatric levels.

Family Counseling

There are two factors concerning the counseling of clients' families at the Lighthouse that are worth noting here. Firstly, family counseling started as a result of the suggestion of one of the early client counseling groups! They said, at the end of the program, that they wished their relatives could have had such a group; that if their relatives could have talked about some of the things the group did, it would have helped them and their relatives. Since that time the counseling of relatives has been a regular part of the rehabilitation program. It includes parents, spouses, adult children, and "anyone with whom you live or who is a very close friend." The "families" meet at a time when the clients are not at the Lighthouse and in absolute privacy.

The second factor to note is that family counseling at the Lighthouse has meant only group counseling, not because this was best, but because of time limitations of the Lighthouse and the families who were frequently employed

---

[78] S. R. Slavson, An Introduction to Group Therapy (New York: The Commonwealth Fund, 1943).

[79] S. R. Slavson, The Practice of Group Therapy (New York: International Universities Press, 1947).

persons.

There is a third factor which might be noted. Except for the Columbia Lighthouse, St. Paul's (in Newton, Mass.)[80] is the only other rehabilitation center for the blind where such family counseling is a regular part of the program. The writer went there to learn more about their counseling procedures from their chief psychologist. The basic approach of counseling services is similar at both centers.

"St. Paul's recognizes that blindness is a family problem."[81] Hadley[82] agreed completely with this philosophy in saying:

> In counseling with a severely handicapped individual it is of particular importance to counsel, also, with family, friends, teachers, employers, and the public at large. When family and friends can treat a client's disability objectively, his battle is half won.[83]

In appealing for "family counseling" for blind clients, MacFarland[84] said that "almost anything we do affects or is

---

[80]"St. Paul's Rehabilitation Center for the Blind," Journal of Rehabilitation, Vol. 25, No. 5 (September-October, 1959), pp. 16-18.

[81]Ibid., p. 18.

[82]John M. Hadley, "Group Counseling and Therapy," Chapter 10 of Clinical and Counseling Psychology (New York: Alfred Knopf, 1958), pp. 227-48.

[83]Ibid., p. 275.

[84]Douglas C. MacFarland, "The Importance of Family Attitudes in Vocational Rehabilitation," New Outlook for the Blind, Vol. 51, No. 10 (December, 1957), pp. 443-45.

affected by family attitudes." Reid[85] came to the same conclusion regarding parental attitudes. Kaufman's dissertation study, using 37 trained and 33 untrained blinded World War II veterans, concluded that "an adequate personal-social adjustment was intimately interwoven with full acceptance in the family and the social community."[86]

Marra and Novis[87] pointed out how a husband's disability can be a family trauma and how it can alter family "role" relationships. Bela Mittelmann[88] advocated concurrent counseling of all family members by the same counselor. Regarding parent counseling, Slavson[89] described the dynamics of "child-centered group guidance of parents" which he carefully distinguished from group psychotherapy.

---

[85]Eleanor S. Reid, "Helping Parents of Handicapped Children," New Outlook for the Blind, Vol. 53, No. 4 (April, 1959), pp. 123-28.

[86]Charles M. Kaufman, "The Personal-Social, Educational and Vocational Adjustment of Blinded Veterans of World War II," Dissertation Abstracts (N. Y.: New York University, 1956), Vol. 16, pp. 1400-1401.

[87]Joseph L. Marra and Frederick W. Novis, "Family Problems in Rehabilitation Counseling," Personnel and Guidance Journal, Vol. 38, No. 1 (September, 1959), pp. 40-42.

[88]Bela Mittelmann, "Simultaneous Treatment of Both Parents and their Child," Specialized Techniques in Psychotherapy, ed. Gustav Bychowski (N. Y.: Grove Press, 1952).

[89]S. R. Slavson, Child-Centered Group Guidance of Parents (N.Y.: International Universities Press, 1958).

Perhaps the strongest statement regarding family counseling for blind clients in a training center was made through a Symposium at the Conference of State Workers for the Blind in Pottsville, Pennsylvania:

> Up to the present time not enough work has been done in preparing the family to receive the trainee properly. This is second in importance only to the client. If the family does not understand the change that has taken place in the client much of the value of the training has been lost. It is imperative that the counselor understand his responsibility and do all he can to establish this understanding between the family and the trainee.[90]

The Evaluation of Counseling Services

The evaluation of counseling services carries with it certain basic problems. Who is to evaluate what and by which standards? How can such evaluations omit the influence of non-counseling factors? There have been only tentative answers and partial solutions to these problems. Perhaps the only nearly complete agreement has been that better evaluations of counseling would be desirable.

In a symposium on research in counseling, Dressel[91] listed the three main approaches as: studies of the counseling process itself, studies of the effectiveness of

---

[90] Adjustment and Prevocational Training for the Blind, Symposium at Conference of State Workers for the Blind, Pottsville, Pennsylvania, Rehabilitation Service Series No. 88 (Washington, D. C.: Federal Security Agency, Office of Vocational Rehabilitation, March, 1949), pp. 5-6.

[91] Paul L. Dressel, "Some Approaches to Evaluation," ("Research in Counseling: A Symposium"), Personnel and Guidance Journal, Vol. 31, No. 5 (February, 1953), pp. 284-87.

counseling, and studies based on data from tests and rating procedures where the outcomes are implicit in the technique rather than explicit. Dressel favors research design with statistical controls to measure the outcomes of counseling such as the studies at the University of Chicago Counseling Center under Rogers.

In the same symposium the second of three papers, presented by members of the research committee of the Division of Counseling and Guidance (now Div. 17) of the American Psychological Association, gave a different approach by Shoben.[92] He called attention to the quality of the client's interaction with other group members and said that studies must relate to the realities of the client's actual extraclinical activities. "Any changes associated with counseling must be evaluated in the light of the judgments made by the client himself, and by those with whom he is closely related, to determine whether they have strengthened his over-all psychological health."[93]

The third paper in the above-mentioned symposium, by Pepinsky[94], lists test score changes, degree of self-actualization, client-counselor interaction, ego-strength, and

---

[92]Edward J. Shoben, Jr., "Some Problems in Establishing Criteria of Effectiveness" ("Research in Counseling: A Symposium"), Personnel and Guidance Journal, Vol. 31, No. 5 (February, 1953), pp. 287-91.

[93]Ibid., p. 290.

[94]Harold B. Pepinsky, "Some Proposals for Research" ("Research in Counseling: A Symposium"), Personnel and Guidance Journal, Vol. 31, No. 5 (February, 1953), pp. 291-94.

compliance to neo-behavioral "models" as possible conflicting criteria of counseling effectiveness. He concluded that a variety of approaches to counseling research is "healthy," but pleaded for better thought-out and designed studies with testable hypotheses.

In his summary for the 1957 Review of Educational Research on "Group Guidance and Group Therapy," Dreese[95] asked for more comprehensive and well-coordinated investigations as a means of improving the effectiveness and efficiency of such studies.

Hahn and MacLean[96] presented six ways to evaluate counseling in a school setting. (One of the roles of the Lighthouse is that of a school for rehabilitation.) They include evaluation by the counselees and maintain that "the feelings of the counselee about the process are of great importance," evaluation by problem type, evaluation by experts, evaluation by measurement of group changes assessed on bases of before-after changes of each client, evaluation through long-range follow-up, and self-evaluations by the counselor.

---

[95]Mitchell Dreese, "Group Guidance and Group Therapy," Review of Educational Research, Vol. 27, No. 2 (April, 1957), pp. 219-28.

[96]Milton E. Hahn and Malcolm S. Maclean, General Clinical Counseling in Educational Institutions (N.Y.: McGraw-Hill, 1950).

Froelich[97], using 279 subjects in a careful follow-up study of the effectiveness of counseling, recognized four criteria: the counselee's occupational adjustment, his personal adjustment, his attitude toward counseling, and changes in his occupational or educational status.

O'Dea and Zeran[98] sent post card questionnaires to 71 fellows of the APA Division of Counseling and Guidance and authors of articles on evaluating counseling. "Client saitsfaction" was ranked first by the weighted scores of the 48 who answered.

Ballard and Mudd[99] listed four sources of criteria measures of the effects of counseling: the client, the persons with whom his life is most intimately involved, society in general, and the counselor. In a study using the case records and follow-up data of 56 marital counseling clients, they found reviewer ratings did not differ significantly from client ratings of "movement" but that reviewer ratings did not adequately predict client ratings at the

---

[97] Clifford P. Froelich, "Toward More Adequate Criteria of Counseling Effectiveness," Educational and Psychological Measurement, Vol. 9, No. 3 (Autumn, 1949), pp. 255-67.

[98] J. David O'Dea and Franklin R. Zeran, "Evaluating Effects of Counseling," Personnel and Guidance Journal, Vol. 31, No. 4 (January, 1953), pp. 241-44.

[99] Robert G. Ballard and Emily H. Mudd, "Some Theoretical and Practical Problems in Evaluating Effectiveness of Counseling," Social Casework, Vol. 38, No. 10 (December, 1957), pp. 533-38.

level of the individual case. A later study by Ballard and Mudd[100] showed that the predictive efficiency of counseling effects was considerably improved when case reviewers' judgments were directed toward specific principal areas of counseling focus.

Mary Bauman's study[101] of 104 legally blind adults in adjustment training concluded that training in itself contributed toward better personality adjustment. This, of course, reflects a major problem in evaluating the effects of counseling upon any clients, especially severely disabled ones, who are concurrently receiving other training or adjustment services.

Regarding the evaluation of the effects of group counseling, Hobbs[102] listed four main criteria: expert judges, protocols of group sessions, behavioral changes and achievements, and client evaluations.

In discussing group counseling,[103] and again some years later in discussing vocational counseling,[104]

---

[100]Robert G. Ballard and Emily H. Mudd, "Some Sources of Difference Between Client and Agency Evaluation of Effectiveness of Counseling," Social Casework, Vol. 39, No. 1 (January, 1958), pp. 30-35.

[101]Mary K. Bauman, "A Measure of Personality Change Thru Adjustment Training," New Outlook for the Blind, Vol. 48, No. 2 (February, 1954), pp. 31-34.

[102]Nicholas Hobbs, "Group-Centered Psychotherapy," Client-Centered Therapy (Boston: Houghton Mifflin Co., 1951).

[103]Robert Hoppock, Group Guidance Principles, Techniques, and Evaluation (New York: McGraw-Hill, 1949).

[104]Robert Hoppock, Occupational Information (New York: McGraw-Hill, 1957).

Hoppock pointed out the advantages of evaluating the effects of counseling with "ultimate criteria" based upon the achievement of ultimate objectives. He showed the dangers and possible disadvantages of using "intermediate criteria" such as test scores or the acquisition of information.

Pepinsky and Pepinsky[105] advocate an eclectic approach in evaluation research as well as in counseling methods:

> Just as there is no "cook book" recipe for prescribing how to counsel, so there is none for determining its effects.[106]
>
> Whatever serves to discover knowledge about the counseling process and its outcomes should be used.[107]

---

[105] Harold B. and Pauline N. Pepinsky, Counseling Theory and Practice (N.Y.: Ronald Press, 1954).

[106] Ibid., p.251.

[107] Ibid., p. 276.

CHAPTER III

BACKGROUND AND PREVIOUS RESEARCH RELATED TO TESTING METHODS USED IN THIS STUDY

There are at least four key issues involved in the study of any testing program such as this. Unless the person conducting the study clearly states where he stands regarding these issues, the study is likely to remain nebulous. The following sections will state this writer's position regarding each issue and include available research and pertinent information. However, there may be many roads to the same testing goals. Therefore a chosen route does not necessarily reject all others.

Norms for the Sighted

The first key issue in testing blind people is whether to use norms for the sighted or norms for the blind. The solution to this dilemma lies in the purpose of the test. If the objective is to compare the testee with a representative group of blind people, he should be compared with norms for the blind. If the objective is to compare the testee with a representative group of sighted people, he should be compared with norms for the sighted.

Since the objective of this testing program was to aid the Lighthouse rehabilitation program toward a vocational goal of competitive employment, sighted norms were used. The client was compared with representative groups of the sighted people with whom he would have to compete for a job. Comparing him with other blind people would be relatively unimportant since he would not be competing with them. The client, his counselor, and the Lighthouse staff wanted to know how each client's abilities and capacities compared with his vocational competitors. The one exception was the use of Bauman's Emotional Factors Inventory which compared adjustment factors of the client with those of other blind people for purposes of helping him during his training period.

Hamilton[1] stressed the goal of competitive employment and warned that norms for the handicapped are unrealistic because the same disability may impose different handicaps for different individuals.

Hoffman[2] described the counseling advantages of interpreting test results to the client in terms of "sighted norms." The National Psychological Research Council for the

---

[1]Kenneth W. Hamilton, Counseling the Handicapped in the Rehabilitation Process (New York: Ronald Press, 1950).

[2]Simon Hoffman, "Some Predictors of the Manual Work Success of Blind Persons," Personnel and Guidance Journal, Vol. 36, No. 8 (April, 1958), pp. 542-44.

Blind[3] concluded that "when feasible the use of standard tests developed for the seeing is recommended." In his study of the work efficiency of blind and sighted workers in industry, MacFarland[4] recommended that "the investigator would like to see more tests developed and standardized so that they could be used with both sighted and blind persons with equal facility." In their "Manual for the Psychological Examination of the Adult Blind," Bauman and Hayes[5] said, "In making psychological studies of blind persons many standard tests have not only proven applicable but are to be preferred to tests especially designed for use with blind persons because they facilitate comparison with seeing persons."

In her "Manual of Norms for Tests Used in Counseling Blind Persons,"[6] Bauman's preface said, "Although I am now making possible 'norms for the blind,' I would like to present the argument against the use of such norms." She then presented her viewpoint that such norms should be used

---

[3]National Psychological Research Council for the Blind, Research Suggestions on Psychological Problems Associated with Blindness (Washington, D. C.: Federal Security Agency, Office of Vocational Rehabilitation, 1951).

[4]Douglas C. MacFarland, A Study of Work Efficiency of Blind and Sighted Workers in Industry (Research Series No. 5; New York: American Foundation for the Blind, 1956).

[5]Mary K. Bauman and Samuel P. Hayes, A Manual for the Psychological Examination of the Adult Blind (New York: Psychological Corp., 1951).

[6]Mary K. Bauman, A Manual of Norms for Tests Used in Counseling Blind Persons (New York: American Foundation for the Blind, 1958).

only by the counselor who is not experienced with blind clients, or has them only occasionally, to teach him more about the blind and how his client compares with other blind clients. But Bauman said, the counselor who regularly works with blind clients should not use such norms and should clinically evaluate his blind client's test performances, i.e. using norms for the sighted.

The Clinical Use of Testing Information

In testing the blind, or anyone else, test scores can be used at face value or they can be interpreted as part of the individual client's total picture. What to do will once again depend upon the purpose of testing. An employer frequently uses tests to screen out the best applicants. For his purposes, test scores at face value can do the job because he doesn't really care about the ones who didn't make the grade. But in the rehabilitation of the disabled, everyone is equally important. Therefore it is important to know why each client scored as he did. Sometimes the "why" is more important than the score to maximally help a client.

This writer knows that ten blind people can attain the same test score, especially on manual dexterity tests, which can indicate something different in each case. One client might be doing his best, another working poorly because of over-reliance on residual vision, another doing well because of over-reliance on vision but with undue strain, another half scared to death, another might work twice as well if he had a little orientation training in the use of

tactual perception, another purposely holding back because he doesn't want to get a job and lose his public assistance checks, another might feel ill because of physical reasons, another ill because of psychosomatic reasons, another had three hours sleep the previous night, another still "mourning" his lost vision and resigned to helplessness, and so on. Yet they might all attain the same score even though it means something different in each case. Therefore this examiner always interpreted all testing information in the light of everything he knew about the client. For the same reasons group testing was never used. Testing meant literally living with one client for about six hours. Further details will be given in the chapter on "Procedures."

Salvatore DiMichael made this point very clear in his 1959 O. V. R. publication[7] when he said:

> In order to make a "psychological evaluation," one must be able to get beneath the psychometric results and to understand the influence producing them. Then only is it possible to use the test results as a helpful index on which to estimate more accurately the individual's suitability for a given vocational objective.
>
> A psychometric profile, no matter how complete, may only be said to represent a series of scores; the interpretation depends upon the skill of the person who makes judgments about the meaning of the scores and who accurately evaluates the underlying facts with understanding.[8]

---

[7]Salvatore G. DiMichael, Psychological Services in Vocational Rehabilitation (Washington, D. C.: Department of HEW, Office of Vocational Rehabilitation, 1959).

[8]Ibid., p. 9.

Testing as Part of Total Services

Closely related to the clinical use of testing information is what is to be done with the information. Stephens[9] stressed the importance of interpreting test results to the rehabilitation counselor so that he fully understands them. Thomason and Barrett[10] believe the counselor should interpret the purpose and vocational significance of the tests to the disabled client in "layman's language." They believe in discussing fully the psychological interpretations and implications with each testee. Tyler[11] concluded from studies, largely in school situations, that counseling generally succeeds better if it includes testing. She, too, advocates sharing test information with the client. DiMichael[12] distinguished between a "psychometric report" which mainly contains test data and a "psychological report" which should include an over-all evaluation and interpretation of the significance of the data. He outlined the "most desirable features" of a psychological report under five general

---

[9]Robert B. Stephens, "Psychological Testing of the Blind," Proceedings of the 34th Convention, American Association of Workers for the Blind (New York: American Association of Workers for the Blind, July, 1950), pp. 115-18.

[10]Bruce Thomason and Albert M. Barrett, Casework Performance in Vocational Rehabilitation, Rehabilitation Service Series No. 505 (Washington, D. C.: Department of HEW, Office of Vocational Rehabilitation, May, 1959).

[11]Leona E. Tyler, The Work of the Counselor (New York: Appleton-Century, Crofts, 1953).

[12]Salvatore G. DiMichael, Psychological Services in Vocational Rehabilitation (Washington, D. C.: Department of HEW, Office of Vocational Rehabilitation, 1959).

headings: "(1) Observations of the Client's Behavior; (2) Technical Results; (3) Interpretation of Technical Results; (4) Recommendations; and (5) Summary."[13] The "Psychological Profile" designed by this writer, and described later in detail, is in keeping with DiMichael's recommendations.

This writer fully believes that testing should be an integrated part of the client's total rehabilitation program. Therefore, in this study, testing information was utilized for counseling, Lighthouse staff conferences, and in conferences with each client's vocational rehabilitation counselor.

Not only was testing information shared with these other people engaged in helping the client, but the test reports and even the profile form were designed for their use and easy understanding. Also, meetings were held to instruct them in the proper use of testing information.

Design New Tests or Use Existing Ones?

Because of limited time, money, facilities, and personal skills, and because it was desired to compare the blind testee with a standardization group of his sighted job-seeking peers, no new tests were attempted. Rather, this examiner went to the authors and publishers, of existing tests in general use with the sighted, who had developed standardized instructions by which a blind person could take

---

[13] Ibid., p. 33.

the same test, as easily and with no disadvantage, and be compared with the regular norms for the sighted. The tests chosen were those which had been extensively used for rehabilitation purposes with the blind. In each case this writer received personal instructions, in the proper use of the test with blind clients, from at least one recognized expert, the test's author, or publisher. The tests were then compiled as a battery with the aid of Dr. Nathaniel Raskin of the American Foundation for the Blind and Dr. Alexander Wesman of the Psychological Corporation in New York. Details of the forms used will be in the chapter on "Procedures." Following are the seven tests used, together with their published references for use with the blind.

1. Pennsylvania Bi-Manual Worksample
2. Minnesota Rate of Manipulation
3. Crawford Small Parts Dexterity Test, Part II.
4. Emotional Factors Inventory

This examiner was instructed by Mary K. Bauman in the use of these tests with the blind. These instructions were in keeping with procedures published by her and others[14] through the Psychological Corporation, Office of Vocational Rehabilitation, and Pennsylvania State Council for the Blind.

---

[14]Mary K. Bauman and Samuel P. Hayes, A Manual for the Psychological Examination of the Adult Blind (New York: Psychological Corp., 1951); Mary K. Bauman, Adjustment to Blindness (Harrisburg, Pa.: State Council for the Blind, Commonwealth of Pennsylvania, 1954); Salvatore G. DiMichael, Psychological Tests for Use with Blind Adults in Vocational Rehabilitation, Rehabilitation Service Series No. 29 (Washington, D. C.: Federal Security Agency, Office of Vocational Rehabilitation, May 1, 1947).

5. Purdue Pegboard

This examiner received instructions from Simon Hoffman[15] and procedures from Dr. Jacob Rothschild[16] according to the general procedures of Curtis.[17]

6. Wide Range Achievement Test (Spelling)

Dr. Alexander Wesman of Psychological Corporation, which publishes the test, advised that the author's standardized procedure could be validly given verbally to blind clients.

7. Wechsler Adult Intelligence Scale (Verbal)

Dr. Wesman and Dr. Bauman advised that this writer's adaptation of procedures outlined by Bauman, Hayes, and Di Michael[18] could be utilized for the WAIS. Dr. Harold Seashore, Director of the Test Division of Psychological Corporation, has since requested this writer's adaptation

---

[15] Simon Hoffman, "Some Predictors of the Manual Work Success of Blind Persons," Personnel and Guidance Journal, Vol. 36, No. 8 (April, 1958), pp. 542-44.

[16] Jacob Rothschild, "A Battery of Psychological Tests in Rehabilitation Services," New Outlook for the Blind, Vol. 53, No. 7 (September, 1959), pp. 249-51.

[17] James W. Curtis, "Administration of the Purdue Pegboard Test to Blind Individuals," Educational and Psychological Measurements, Vol. 10 (1950), pp. 329-31.

[18] Mary K. Bauman and Samuel P. Hayes, A Manual for the Psychological Examination of the Adult Blind (N. Y.: Psychological Corp., 1951); Salvatore G. DiMichael, Psychological Tests for Use with Blind Adults in Vocational Rehabilitation, Rehabilitation Service Series No. 29 (Washington, D. C.: Federal Security Agency, Office of Vocational Rehabilitation, May 1, 1947).

for their distribution.[19]

Considerable work has been done in developing projective techniques, for use with the blind, using auditory, tactual, three-dimensional, and other media. Morris[20] presented an excellent survey of this field. However, all the studies are very limited in terms of adequate standardization. Probably the best standardized of these tests was the "Bas-Relief" of Harris[21] which is based upon Rorschach principles; i.e. like a Rorschach in low relief. Dr. Harris demonstrated the test to this writer but advised against its use because of still inadequate standardization for valid norms. Dr. Nathaniel Raskin, of the American Foundation for the Blind which sponsored their research, felt the same way about the Chevigny and Braverman developments of the tautophone type of test. Therefore, no projective tests were used in this study.

One other very significant development in testing the blind should be mentioned. Professor Harriett C.

---

[19] Letter from Harold Seashore, Director, Test Division, Psychological Corporation, November 27, 1959.

[20] Woodrow W. Morris, "A Survey of Projective Techniques for Use with the Adult Blind," Psychological Diagnosis and Counseling of the Adult Blind, Proceedings of the University of Michigan Conference for the Blind, 1947 (N. Y.: American Foundation for the Blind, 1950), Chapter 9, pp. 114-29.

[21] William W. Harris, "A Bas Relief Projective Technique," Journal of Psychology, Vol. 26 (1948), pp. 3-17.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Shurrager,[22] of the Illinois Institute of Technology, is presently developing a Performance Scale for the WAIS which can be used as validly with blind people as the present Verbal Scale. It is being standardized nationally with a well designed sampling of 900 blind subjects. The availability of a Performance Scale for the WAIS will remedy its present qualitative and clinical weaknesses which result from being able to use validly only the Verbal Scale. However, this test will not be ready until about 1961. This writer has currently been employed by the Illinois Institute of Technology to standardize the test for the Washington, D. C., area.

---

[22]Harriett C. Shurrager, Performance Scale for the Adult Blind (Chicago: Psychology Research, 1958).

CHAPTER IV

PROCEDURES

This writer had an objective--a goal--to set up as expeditiously as possible a program of psychological services, which he could conduct, to help adult blind clients at the Columbia Lighthouse achieve as much as possible in their rehabilitation programs. These services included group, individual, and family counseling which was received by 60 blind clients in two years. These services also included a testing program which was utilized with 93 clients during the same two years. All services were maximally coordinated for each client's total rehabilitation. This program of psychological services was officially recognized and commended by the American Foundation for the Blind and the District of Columbia and Maryland Departments of Vocational Rehabilitation and was in keeping with the testing standards of the Psychological Corporation.

Methods of Psychological Counseling Services

The three counseling services of group, individual, and family counseling were scheduled parts of the regular

rehabilitation program at the Columbia Lighthouse for the Blind. The Lighthouse staff fully accepted and cooperated with these services. Weekly "psychological staff conferences" were held where each of the approximately eight current clients could be discussed in detail. Periodic, but not regular, conferences were also held with each client's respective Department of Vocational Rehabilitation counselor.

Subjects

All 60 subjects were "legally blind"[1] adults. They ranged in age from 17 to 65. All were in the eight to twelve week rehabilitation program at the Columbia Lighthouse some time between the summer of 1957 and the summer of 1959. They were in classes of approximately eight. There were 38 male and 22 female subjects; 47 were Negro, 13 were white. All were potentially employable but presently unemployed because of the handicaps imposed by their visual disability.

Individual Counseling

Individual counseling was scheduled for every Wednesday during each client's program, so arranged that it would not interfere with his instructions. It was held

---

[1] Russell C. Williams and Maxwell D. Flank, "Therapy for the Newly Blinded, as Practiced with Veterans," Journal of the American Medical Association, Vol. 158 (July 9, 1955), pp. 811-18.

by this writer in a private office with the telephone shut off and no disturbances permitted. Each client was allowed up to 45 minutes, but he could leave whenever he wanted.

Every client was told, from the first, that this was his time, and the counselor was there to help him. He could use the time however he wished, talk about or ask about anything at all, discuss anything or nothing. He could sit silently, or he could leave after saying "hello." The room was comfortable; an arm chair and ash tray were provided. During the two years no client ever refused the services or was excessively absent on Wednesdays.

The range of counseling content included an almost extreme array of feelings and an even wider array of verbal expressions of these feelings. The weather, fears, phobias, anxieties, art, politics, test results, optimism, despair, contemplated murder, experienced sexual perversions, shop projects, joy, homosexuality, jobs, relatives, education, prison terms, weeping, information seeking, guide dogs, and various confessions do not even begin to describe the range of counseling responses to being able to talk about anything or nothing at all. Problem areas overlapped and merged and interrelated. But these were mostly people who would be considered within the range of "normality," who were seeking help to do better, or feel better, or relate better. In keeping with many of the studies in Chapter II,

the actual visual disability generally created fewer and less severe problems than interpersonal relationships or how clients thought of themselves.

As stated previously, this counselor's approach was eclectic in that he tried to use whatever counseling procedures would best help his client at the particular time. In that sense, only, it was client-centered. It was generally what might be called 'minimally directive,' mostly because clients so often seemed to be able to benefit from talking-out their feelings to someone who would accept them and be able to fully understand with empathy.

But sometimes it was important to point out realities, especially in vocational or educational matters. What to do and what was 'right' or 'best' had to be decided or remain undecided by the client. But likely outcomes and possible alternatives could be offered by the counselor. For example, whether a client would seek work or remain on disability relief was up to him, not his counselor--and no client was ever given reason to doubt this. But if he decided to seek work he was informed of the difference between looking for a job and being willing to accept one. If he then wanted to know how to look for a job he was told and given a choice of full-time and part-time job-seeking programs. He was then assured that he could of course forget about job seeking, and remain on relief, or wait for someone to find a job for him, and even tell everyone

he wanted to work. But if he really wanted to look for a job, he now knew what it would mean.

If a client contemplated murder, and this happened several times, he was first helped to understand that the counselor knew how he felt. Then he *might* be asked to assume he had done so and to tell what it would mean, to him, to others, how he would feel about having done it; then perhaps he would do the same for other alternatives.

A 40 year old blind woman had studied French on her own for 18 years and thought she could speak it fluently. She completed two years of college as a girl and planned to return to become a French teacher. Her attempted French conversation showed that she knew very little. She was told about language achievement tests at the local university. A highly paid jazz musician decided that his occupation wasn't in keeping with his newly found religion. He felt it was "away from Christ" and that he should only play "sacred music" gratuitously for his church. This counselor had to tell his vocational rehabilitation counselor that she could inform him that if he refused employment his relief checks might be discontinued; but that it was not a good idea to keep telling him to "give up that religion and get to work." Non-musical occupations were then explored

The above examples of cases have been described to illustrate "directiveness" in this writer's counseling along with his minimally-directive more frequent approach.

Thus, although sometimes "directive," counseling never told a client what to do or what he should do. It usually let him explore and determine his own alternatives. It sometimes helped him explore further, and presented other possibilities. But final choices were always his as, in reality, it would be anyhow.

It is difficult for a counselor to specify what he does in counseling. It is somewhat less difficult to specify what he doesn't do. This counselor has already said he did not tell clients how to decide or what to feel.

Also, this counselor did not attempt to probe into the unconscious, or interpret symbolisms, or discover the sub-conscious. The client could talk about anything he wished. But the counselor never encouraged a client to examine what he was not ready to recognize and accept. The counselor felt that his own limited time, abilities, and scope of services precluded such deep-level or personality restructuring material. However, several clients were referred to the consultant psychiatrist at the Department of Vocational Rehabilitation for additional counseling or psychiatric services.

Records of Individual Counseling

This counselor kept cumulative records of every session with every client. Clients knew about the records, but were assured that all records, like all counseling content, would be kept confidential. Approximately fifteen

minutes was spent immediately after each session to write the cumulative record. These records were solely for the counselor's use, to refresh his memory. Very often it was in the form of key quotations which expressed the client's feelings as well as subject matter. Sometimes it contained outlines of ideas, or things to look for, or symbolisms to regard but not interpret to the client, or other notes. During and after the program, these dated records were kept in the counselor's private files.

Group Counseling

The same clients who had individual counseling also met for 75 minutes every Friday for group counseling. This was held in absolute privacy, with telephones shut off and no interruptions, in a large living room with sofas, arm chairs, and ash trays.

The clients were told that everyone present was in the Lighthouse program which includes adjustment training in travel skills, Braille, home economics, shop, and many other things. "But adjustment also includes our relationship with ourselves, our families, and our communities." Clients were told they would be able to meet every Friday at the same time to help these personal adjustments. This time was theirs, and they could do or talk about anything they wished, providing it had something directly or indirectly to do with a group member's personal adjustment--with himself, his family, or his community.

Clients were told by this counselor that he was there to help them. They could talk with or without him about anything that was important to anyone in the group. They could ask any kind of information. "If I know the answer, I'll tell you. If I don't know the answer I'll say 'I don't know.' If someone at the Lighthouse knows more about it than I do, I'll let you know. And if I don't want to talk about something I'll tell you that too, although that hasn't happened yet. There isn't any subject you can't discuss."

Members were told some of the values that might be found in such a group. They could exchange ideas and benefit from each other's experience, get things off their chest, find out what others thought about their feelings or "pet peeves." They could know that here was a group of fellow blind students who probably went through many or most of their difficulties, so that they were not the only ones and not alone. They were told that they would probably learn much more from each other than from the counselor and that the counselor would probably not do this much talking again. Also they were told that the counselor would keep confidential everything that was said.

This introduction to group counseling took about ten minutes and was usually followed by having each client, who wanted to do so, say something about himself or his interests.

Clients spoke out whenever they wished. But for the first meeting, they said the name by which they wanted to be called, prior to speaking, so that members could learn to associate each voice with its respective name.

Certain other general procedures were usually agreed upon. Anyone who spoke had to speak to the group since private conversations would cause too much confusion and could be held later. About this time someone usually wanted the counselor to verify if everything would be kept confidential. He replied that he would keep it confidential but that it would be up to the group members to decide if they wished to do so too. Out of this came the procedure for group voting. The counselor would say, for example, "will all those in favor raise their hands; all those against, raise their hands." The counselor then announced the number of hands raised without saying who voted each way. Thus the clients had an anonymous voting system.

It should be noted that all group procedures, except the explanation of what the group was for, were decided upon by each group.

Subject content of the groups were as least as varied as in individual counseling. However, certain things tended to come up in all the groups. Fears of getting hurt or lost, difficulties with strangers during travel, misunderstanding or over-protective relatives, what they were at the Lighthouse for and who would find them jobs, whether a blind person can really get competitive

employment, laws, agencies and services available to the blind, alcoholism, the psychological tests, the practices and ethics of begging, disabilities "worse" than blindness, how difficult Braille is, why both men and women are taught shop and home economics, superstitions and misinformation about blindness, how to look for a job, community attitudes about blindness, and their own attitudes about blindness, each other, and themselves. Sometimes they asked the counselor if he would do certain things. Several groups asked for, and received, classical music on hi-fi. Most groups asked that at least one period be devoted to having the counselor teach them how to efficiently look for a job and how to use the want ads. When role playing was explained, some groups liked the idea and took turns at being employer and blind job-seeker. It was sometimes amazing how many clients had tried to answer job ads by calling a few employers and asking, "Do you have any jobs for blind people?" After several of the obvious answers they had given up in defeat.

There was some carry-over of group discussions into individual sessions and frequently a client said during individual counseling that he might bring it up in the group to see what they would say. Some groups also had messages for their relatives' group in terms of things they would like their relatives to [illegible]ider.

Several improvements in the Lighthouse instructional program came as a result of these groups' suggestions. Also they suggested and carried out ways in which they could help later groups. For example, after discussing how scared they were the first day, someone said they wished a graduate from the previous class had been there that first day. Someone else said, "Why don't we be there for the next class?" Since that time, every group has unanimously voted to be "hosts" to the new students on their first day at the Lighthouse. In the same way another group set into motion the idea of leaving their shop and sewing projects on display so that clients being interviewed for admittance could see what the previous students had made and discuss it when they came in as hosts, because "Everybody can tell you what a blind person can do; but its better if you can actually feel it and talk to the person who was scared just like you when he came in."

Records of Group Counseling

Records of group counseling served certain purposes not necessary for individual counseling. They of course served as cumulative reminders of content for the counselor. But more than that, they helped him to do his job of trying to be aware of what each experience meant to every client. Such a goal is of course never totally possible. But the closer a counselor comes to knowing what each experience means to each client, the better he can help each client to

get as much as possible out of the group without hurting any other client. And since the same thing can mean something different to each client, group counseling was sometimes like individual counseling in eight dimensions. This kind of complexity came into play, for example, when the group was exerting strong pressure on a member whom they felt deserved it. The counselor might have to consider how much pressure the client could profitably take, if and how he should be rescued, another client getting unhealthy secondary pleasure from exerting pressure, a third client who should assert himself but would feel undue guilt if he exerted too much pressure, how much time was left in the period, how individual counseling could be utilized, a fourth client who seemed overly nervous for some unknown reason, and so on. Actually such factors can be enumerated only in retrospect. The counselor, or at least this counselor, found himself considering these things, as best he could, simultaneously and automatically, sort of moving with their movement.

To help his work, and also for didactic purposes, two kinds of records were kept of each group session. A large card was kept for each client where his part in each session was recorded. Also a separate record was kept of the group dynamics of each session, showing the relationship of each client's participation to session content. Thus, each client's personal participation could

be seen for each meeting as well as his relative relationship with every other client at each meeting.

Also on the individual records, the following information was very compactly coded: name, address, phone, sex, race, age, education, marital status, degree of blindness, cause, age of onset, secondary disabilities, work experiences before and after blindness, WAIS I.Q., and any pensions or relief. These records were also present at all individual counseling sessions. All records were kept in this counselor's private files.

Family Counseling

The idea for family counseling came from one of the early client groups! Someone said they wished their relatives could have a chance to talk about some of the things discussed in group. Someone else said something to the effect that the Lighthouse teaches how to cook full course dinners but her mother doesn't let her near the stove because she might get burned. Another client asked what good it was to learn things if you weren't allowed to do them. They later voted in favor of a group for relatives and it has been a part of the regular program since that time.

The relatives' groups were held on Fridays from 2:00 p.m. till 3:30 because on that day the clients leave at 12:30. Thus the relatives' group was held when the clients weren't even in the building.

It was held in the same room where the clients' groups were held. "Relatives" included parents, spouses, siblings, adult children, and "anyone with whom you live or who is a very close friend" in order to include landladys of client's rooming houses, et cetera. They were all sent invitations by the Lighthouse.

Relatives were told about the clients' group, that it was held in the same room, and all the reasons for having it. They were told about the importance of the adjustments that blind people had to make in a world of sighted people. Then they were told that people who live with or are very close to blind persons also have to make adjustments--and that sometimes the adjustments of the sighted friends and relatives are more difficult than those of the blind person; "because if he makes a mistake he walks into a wall or bumps his nose and its all over with. But if you make a mistake, by putting something in the wrong place, or saying the wrong thing, or being too protective, you may feel that you made him feel badly. And then you don't know what to do and it's not over with."

This more directive kind of opening with the relatives' group was taken because of several factors. Firstly, there were no individual counseling arrangements for the relatives although they could see the counselor privately after the group. Secondly, many of the relatives worked and could not come every week. Third, the counselor's

prime objective in the relatives' group was to help the client; it was actually a client-centered relatives' group.

Therefore it was necessary to get right down to business, with the very first meeting, since some of the relatives might not be able to come again. This counselor did not think that such counseling conditions were especially good, or that necessary directiveness was desirable. But it was that or nothing, since other hours and individual counseling could not be arranged. However, the relatives seemed aware of these difficulties too and appeared anxious to learn as much as possible in the group about their own feelings and how to get along better with their blind relative. Also they invariably had special interpersonal problems that they wanted to talk about and always had informational questions to ask. Perhaps even more than the clients, the relatives needed a peer group--of other people related to blind persons--who could understand their problems with empathy and a "we went through it, too," feeling.

Every relatives' group was especially concerned with two subjects. One was the clearing up of certain superstitions and facts about blindness, most of which could be answered by "the only difference between blind people and sighted people is lacking vision." This was concerned with such questions as "is it true that blind people shouldn't drink" or "were punished by God," or "can hear what nobody else can?"

The other invariable subject was some form of, "If I don't let him do it he gets angry; and if I do let him do it I know I'll never forgive myself if anything should happen." The reasons for not understanding the following may have different underlying causes for different persons:

(a) Who are you considering, him or yourself?

(b) Doesn't he have a right to decide what he should do?

and (c) If, for example, you keep telling him not to go downtown alone until he finally says he will do it anyway, he may start out and find it really is too dangerous until he learns more travel skills. If you had said nothing he would turn around and go home. But if you kept telling him not to go, he may not want to "lose face" and go ahead dangerously even though he knows he shouldn't.

However, this counselor felt it was best to use a certain amount of directiveness to expedite getting these kinds of points across, since the relative might not be able to leave his job to come to another meeting, although it would have been better to let him work it through in a number of meetings.

Some relatives came to every meeting, some to only a few, but most came at least once. Usually their reasons for not coming was that they were employed during those hours. For some groups, meetings were held every second or third week. All relatives were also shown the Lighthouse facilities

and the manufacturing shops where blind people were employed in piecework production.

From the above, it should not be construed that group interaction was largely counselor-client. Actually it was mostly group intra-action and this was encouraged since the relatives would probably accept more from each other than from the counselor. Nor should it be construed that this counselor believes directiveness is not good. Rather, this counselor simply deplored that because of lacking time and other limitations, he had to use more directiveness than would be best if he had had more time.

A last point should be made clear. The relatives were told that our primary objective was to help the client, but that the Lighthouse believed that the better adjusted they were, the better it would help the client; that we were helping the client by trying to help them.

Records of Family Counseling

Two kinds of records were kept of the relatives' groups. Attendance was kept on a card showing everyone who was invited and his relationship to the client, and who actually came to each meeting.

Also there were similar records to those kept of the clients' group. The records of relatives' meetings were also kept available during individual counseling of the respective clients.

Design to Evaluate the Counseling Services

The evaluation of counseling services actually meant evaluations of the effects of such services upon the clients. There were three sources of these evaluations: the respective clients, the Columbia Lighthouse staff, and each client's vocational rehabilitation counselor. Each source had its own evaluation criteria.

The Respective Clients

The primary objective of counseling the clients was to help them get as much as possible out of their rehabilitation program. Therefore 25 specific items of rehabilitation adjustment were chosen for evaluation by the clients. These particular items were chosen because:

(a) They are clear-cut factors of feelings or behavior which invariably came up during counseling and which the clients could understand.

(b) They are items which clients could relatively easily decide in terms of whether they had more or less.

(c) They are items which are universally accepted by rehabilitation authorities in terms of their desirability or undesirability.

(d) They are items which could indicate the "good" or "bad" effects of counseling services with equal facility.

(e) They are not absolute "all-or-none" items by which a client would commit himself. Rather, they can be expressed in relative degrees on the basis of before and after counseling.

The Questionnaire

Each of the 60 clients were given the questionnaire in complete privacy. The questionnaire and directions are reproduced in Appendix A. It was administered verbally and their responses were marked for them on separate sheets. They were assured that all responses would be kept anonymous and that their names would not appear anywhere in the study. The purpose of the questionnaire was explained.

> We would like you to help us make our counseling program as good as possible for future blind clients. You had three kinds of counseling services. You were in group counseling on Fridays, individual counseling on Wednesdays, and there were separate counseling groups for relatives on Fridays. What do you believe was the effect of these three counseling services on you concerning each of the following.

The questionnaire then proceeded with two sample items to acquaint the client with the procedure and to make sure he understood the directions.

> As a result of counseling, do you now have much more, more, less, or much less: Ability to understand the problems of others?

Then, after the reply:

> Concerning this same thing, which was the most helpful counseling service, your Friday group, the Wednesday individual, or the relatives' group?

After the reply, or after any further explanation necessary to help the blind client understand the directions:

> If you believe that the effect of counseling was neither more nor less, or if you do not know the effect, tell me so.

Then the second sample item was given:

> As a result of counseling, do you now have <u>much more</u>, <u>more</u>, <u>less</u>, or <u>much less</u>: Uneasiness when discussing blindness?

Then, after the reply:

> Concerning this same thing, which was the most helpful counseling service, your Friday group, the Wednesday individual, or the relatives' group?

This question followed each of the questionnaire items.

Likewise, each item was preceded by:

> As a result of counseling, do you now have <u>much more</u>, <u>more</u>, <u>less</u>, or <u>much less</u>:

The complete directions are in Appendix A.

<u>The Items</u>

There were 25 items of adjustment which the Lighthouse staff and the D. C. Department of Vocational Rehabilitation counselors considered important for the personal and vocational rehabilitation of blind clients. These items were grouped into five "areas of adjustment" with five items each. But it should be made clear that these particular items are not supposed to delimit the areas, only to represent them. Following are the five "areas" with their respective items. The desirable direction for each item is indicated by "more" or "less," in parentheses, before the item.

A. Emotional Adjustment

(less) 1. Sensitivity about blindness, such as feeling ill at ease when carrying the white cane.
(more) 2. Feelings of independence.
(more) 3. Feelings of self-respect.
(more) 4. Belief that you can be a valuable citizen in the community.
(more) 5. Ability to express and discuss feelings.

B. Social Abilities

(more) 1. Ability to ask a sighted stranger for needed aid, such as to cross a busy street.
(more) 2. Ability to ask a relative or close friend for needed aid, such as how clothing or grooming looks.
(less) 3. Feelings of discomfort when eating in restaurants or someone else's home.
(less) 4. Exclusive seeking of blind companions or avoidance of sighted social groups.
(more) 5. Ability to understand the feelings of others.

C. Unwarranted Fears, Nervousness, or Depression

(less) 1. Unreasonable fear of using "travel" ability to travel alone.
(less) 2. General fear of things which are not really dangerous.
(less) 3. Feelings of depression.
(less) 4. General pessimism because of lost vision.
(less) 5. Feelings of general nervousness.

D. Attitudes Regarding Handicap(s)

(less) 1. Tendency to blame blindness for personal failures which have nothing to do with vision.
(less) 2. Desire for unwarranted special treatment because of blindness.
(less) 3. Self-assessment in terms of a handicap rather than in terms of abilities.
(less) 4. Feeling that blindness is the worst thing that can happen to anyone.
(less) 5. Feeling that sighted people often cheat or take advantage of blind persons.

E. Vocational Preparation (attitudes, plans, goals, motivation, and action)

(more) 1. Clearer vocational plans.
(more) 2. Knowledge of how to look for a job.
(more) 3. Desire to go for job interviews as soon as possible.
(less) 4. Worry that prospective employers may be unjustifiably prejudiced against hiring blind persons or that it is nearly impossible for a blind person to progress very far on a job.
(more) 5. Ability to get along with fellow employees (or students).

The items were arranged in mixed order so that those items where "more" or "less" were desirable did not come in any particular sequence. Thus, sometimes "more" was a desirable response and sometimes "less" was. Also the items were arranged to have minimum influence on each other.

A final item was included:

> Which of the three counseling services do you think was the most valuable for you?

This was aimed at allowing the client to express his judgment of the over-all most valuable service as distinguished from the greatest number of items helped by each service. That is, the counseling service which was "most helpful" regarding the greatest number of items may not necessarily be the service considered most valuable by the client.

The questionnaire items are included in Appendix A.

The Scoring Scale

Since a stated objective of this study was to evaluate the "good" and "bad" effects of counseling, the scoring scale had to be equally distant in both directions. A client could not be asked to indicate on a scale, of say 0 to 100, the extent to which each item pertains. That would not offer equal possibilities in the opposite, e.g. undesirable, direction. Therefore the scoring scale used here extends equally in the desirable and undesirable directions; i.e. depicting equally the "good" and "bad" effects.

The next question was the number of intervals on the

scoring scale. There are certain statistical advantages in having a scale with many intervals, especially if there are enough intervals to be considered continuous. With such a scale there are the possible advantages of using certain correlation procedures. However, it was felt that such a design would not yield the most valid results because of the client's inability to really judge more than two intervals in each direction. That is a client could judge whether he has "much more," "more," "less," "much less," or "neither more nor less," of an item. But he probably could not make any more distinctive judgments for most items. Therefore the scale used was a five point scale, with equal intervals, represented by indices as follows:

+2 for the desirable "much more" or "much less"
+1 for the desirable "more" or "less"
0 for "neither more nor less"
-1 for the undesirable "more" or "less"
-2 for the undesirable "much more" or "much less"

A sixth scale category of "I don't know" was included which was also scored as zero.

Use of this scale had the disadvantage of precluding the use of certain correlation methods (i.e. since the data would be neither continuous nor linear). But it had the much greater advantage of coming closest to indicating the client's valid judgments of the effects of counseling.

The Evaluation Criteria of Clients

The evaluation criteria of clients were their "best judgments." Obviously this is not a perfectly valid criterion. (If it were, there would be no need for the other evaluation criteria in this study.) There are three main factors which

keep it from being perfect--about which little could be done --and a fourth factor about which a great deal was done.

Little could be done about:

1. The fact that counseling services weren't the only influence on clients' adjustments. Certainly the concurrent rehabilitation program, and other outside influences, were important too.

2. The fact that the five "areas of adjustment" overlap in many cases. There probably are no exclusive "areas of adjustment"; they are arbitrarily agreed upon for the convenience of study or operations.

3. The above-described scoring scale, even though only two intervals in each direction, assumes that these intervals are equal. A great deal of consideration was given to this with the conclusion that that assumption is more valid than any other. In other words, it seemed that clients actually judged on the basis of a five point scale with five equally-distant points.

This writer believes that the best way to deal with unavoidable weaknesses in research design is to recognize the weaknesses so that they can be best accounted for. This writer believes that the above three weaknesses were largely counteracted by a fourth factor.

"The evaluation criteria of clients were their best judgments." This implies that the clients were consciously and subconsciously really trying to give true answers. Such a goal was facilitated by honestly letting the clients know

what the study was about and what it hoped to do, namely to secure accurate information to help future blind clients. The helping of other blind clients was the positive motivation. The procedures and items tried to minimize any conflicting motives or vested interest to give other than "best judgments." This examiner felt that the subjects did want to help future blind clients and did try to give their best judgments. The extent to which they judged accurately can never be known. But the judgments do seem to be their best. Possible future research, using improved criteria with controlled experimental designs, will be discussed in a later chapter.

The Columbia Lighthouse Staff

The Lighthouse staff consisted of three instructors, one being the supervisor of training. These three instructors conducted the rehabilitation program at the Lighthouse for all 60 clients in this study. They were with the approximately 7 or 8 clients, daily from 9 to 4 p.m., during the 8 to 12 week rehabilitation programs.

The Lighthouse staff had two main duties: to teach rehabilitation skills, and to make professional evaluations for the District of Columbia or Maryland Department of Vocational Rehabilitation. Rehabilitation skills taught included cane travel, Braille, typing, shop, crafts, home economics, and sewing.

The professional evaluations were made in final reports at the end of the program. These evaluations were based upon their extensive observations of the clients during the program as well as clients' abilities in learning and performance.

It was made clear to the Lighthouse staff that the objective of this study was to get accurate information as a means of improving counseling services for future blind clients. It was made especially clear that this writer would neither benefit nor lose from whatever results were obtained. Also that the writer would not be affected even if the study showed no values or harmful effects from counseling services. The staff did not know the responses made by any clients or vocational rehabilitation counselors.

The frequently long deliberations by the staff, and what at all times seemed like their sincere attempts at accurate judgments, attested to their acceptance and compliance with the objectives of this study.

The Questionnaire

After they fully understood the purposes of the study, the staff heard the following for each of the 60 clients:

> We would appreciate your help in the evaluation of our ten week counseling program for blind clients. Please indicate your opinion of the effect of the counseling services on (client's name) for the following factors:

For each factor in the questionnaire, the staff then judged the effect of counseling services on the client in terms of:

It helped greatly.
It helped somewhat.
It neither helped nor hindered.
It hindered somewhat.
It hindered greatly.
I don't know.

The Items

The questionnaire for the staff had only five items. These were the same five "areas of adjustment" that were in the clients' questionnaire. They were:

A. Emotional Adjustment

B. Social Abilities

C. Unwarranted Fears, Nervousness, or Depression

D. Attitudes Regarding Handicap(s)

E. Vocational Preparation (attitudes, plans, goals, motivation, and action)

To make sure the staff knew what to judge and were all judging the same thing, a table of definitions was given for each "area of adjustment."

These definitions were the same, verbatim items, which the clients judged. Thus, by definition, the staff and the respective clients both judged the effects of counseling on the same "areas of adjustment."

The Scoring Scale

The same type of scoring scale and indices were used for the Lighthouse staff as for the clients, and for the same reasons. Thus:

+2 for "It helped greatly"
+1 for "It helped somewhat"
0 for "It neither helped nor hindered" or "I don't know"

-1 for "It hindered somewhat"
-2 for "It hindered greatly"

Therefore the following are directly comparable in that they relate to the same things:

Score	Staff Evaluations	Client Evaluations
+2	"It helped greatly"	the desirable "much more" or "much less"
+1	"It helped somewhat"	the desirable "more" or "less"
0	"It neither helped nor hindered"	"neither more nor less" or "I don't know"
-1	"It hindered somewhat"	the undesirable "more" or "less"
-2	"It hindered greatly"	the undesirable "much more" or "much less"

These all represent evaluations of the effects of counseling services upon the client for the specified "areas of adjustment."

Evaluation Criteria of the Lighthouse Staff

The Columbia Lighthouse staff are professional evaluators for the District of Columbia and Maryland. Their evaluations were prime considerations in determining further services and the spending of state-federal funds on the blind clients in this study. They are considered one of the better evaluation teams in the nation. Therefore their evaluation judgments in this study, which is similar to their regular professional evaluations, can be accepted as the best available criteria of its kind. Furthermore, their evaluations in this study are made within their existing evaluation facilities, i.e. clients who completed their

regular program. Therefore their judgments were not influenced by changed program conditions since they did not know they would evaluate the clients when they were in the program.

However, the same influences which complicated client judgments also beset staff judgments. Namely, counseling wasn't the only influence on adjustment, the overlapping of "areas," and the assumption of equal scale intervals. The first two factors could be dealt with only on the basis of the staff's experienced professional abilities to judge what influenced what. Although undoubtedly not perfect, their judgments seemed as accurate as possible for a group of evaluators, considering their extensive knowledge and experience with each client-subject. The matter of equal scale intervals was relatively easily solved by explaining to them what was wanted.

A further explanation should be made about the procedures used for staff judgments. The staff used the same procedures that they always used in evaluating clients for final reports for the District of Columbia and Maryland. They discussed the matter to be evaluated for each client and then voted on it. Any disagreements were further discussed with further voting. Two things should be made clear here:

First: the discussions and voting were truly on a democratic basis. Each staff member told what he knew about the client. Even though one staff member was the supervisor,

he exerted no pressure to have his way. If any disagreement persisted, a majority vote ruled (i.e. there were three staff members).

Second: the evaluation and voting procedures were not designed for this study. They were the ones regularly used. It was felt that by doing so, the possible ego involvements of a new procedure could be avoided. The staff were simply doing their usual job.

Each Client's Vocational Rehabilitation Counselor

A client's vocational rehabilitation counselor works with the client before he comes to the Lighthouse program and then again afterwards concerning further training or job placement. He has detailed records, knows a great deal about each client, and can especially consider him from the vocational point of view. Thus it was felt that each client's vocational rehabilitation counselor could make a valuable evaluation contribution by judging the effects of counseling on the client from that vantage point. There were five Department of Vocational Rehabilitation counselors in all, two in the District of Columbia and three in Maryland

Each client's respective vocational rehabilitation counselor was given the same questionnaire used with the Lighthouse staff. The items and scoring scales were identical. The only procedural difference was that whereas the staff evaluated as a team by majority vote, the

rehabilitation counselor evaluated as an individual, consulting only his records. Therefore:

The Questionnaire--was the same as for the Lighthouse staff.

The Items--were the same as for the Lighthouse staff.

The Scoring Scale--was the same as for the Lighthouse staff.

Evaluation Criteria of the Client's Vocational Rehabilitation Counselor

Since the questionnaire and procedures were essentially the same for the vocational rehabilitation counselor as for the Lighthouse staff, much the same can be said in both cases. The only real difference was that the rehabilitation counselor was judging as an individual in his own office and with his own official records as a reference.

There is every reason to assume that he judged as objectively as possible. Since this project and its objectives met with the approval of the Director of the Department of Vocational Rehabilitation, he actually was doing part of his job. Also, since time was officially assigned for it, he had no reason for negative feelings about losing time.

In discussing the rehabilitation counselor's "best judgments" as an evaluation criterion, it should be noted that although he responded to the same questionnaire as the lighthouse staff, it was from a different perspective. He knew the client less intensively, but for a longer period of time. Also he knew the client in relationship with other

prior and later services. He further knew about the client's experiences with, or evaluations for, employment situations. And, of greatest importance, he knew what happened to the client since the counseling services. Therefore, while the Lighthouse staff evaluated on the basis of intensive experience with the client, the vocational rehabilitation counselors evaluated on the bases of extensive knowledge and follow-up of the client since services.

Methods of Psychological Testing Services

The psychological testing services in this study were conducted for the District of Columbia and Maryland Departments of Vocational Rehabilitation by this writer. These services included a battery of tests compiled by the writer and presented in a "Psychological Profile" form copyrighted[2] by him. These services also included the coordination of testing information with each client's vocational rehabilitation program through conferences with his rehabilitation counselor and the Lighthouse staff, if the client went there.

Subjects

There were a total of 93 subjects, all "legally blind" adults between the ages of 17 and 65. Fifty-five of them later became Columbia Lighthouse clients. Thirty-eight were tested for various other reasons, such as

---

[2]Martin Bishart, Psychological Profile Form for the Blind (Washington, D. C.: by the author, 1958).

vocational training, education, or placement, and did not go to the Lighthouse (i.e. since the writer also tests non-Lighthouse blind clients for the District of Columbia). All clients received the same tests and testing conditions. The tests were given between September 1957 and July 1959.

Testing Conditions

All tests were given in an air-conditioned and fairly sound-proof room in a separate building not near the Lighthouse. There were no telephones and no interruptions. Conditions of comfort and convenience were close to ideal and included, for example, private washroom facilities.

Appointments for testing were made with the clients. The client then received a confirming notice in the mails. Testing usually took about six hours including a lunch period. The client could bring his own lunch or order it from a local luncheonette. When he left, he could go on his own or have a taxi or relatives call for him depending on his travel skills.

The client and this examiner were the only ones present during testing. Relatives who came had to leave and be called later. Since testing was always individual, and took most of a day, no other client was ever present.

The true purpose for which he was to be tested was always explained to the client. Purposes were generally explained in terms of "finding relative strengths and weaknesses" or "finding out how you would do at certain kinds

of work" or "seeing what services can best help you" as related to vocational training, job placement, education, the Lighthouse program, or other services.

The Testing Situation

The testing situation included everything from the appointment until the client left, anything which could yield pertinent information. As explained in Chapter III, the Psychological Profile considered not only scores but also the factors influencing performances. Often valuable information was obtained from just being with the client for six hours.

Also an important part of the testing situation was the interview which followed the last test. At that time the client was asked such things as his first three job choices, minimum acceptable salary, how things seem to him in general, whether he believes he will get a job, or why he left school; and he in turn was given the opportunity to ask questions or express his feelings.

Therefore the testing situation consisted of the test scores and factors influencing the client's performances, living with him for six hours, the interview situation, and all in relationship with the medical, ophthalmological, and social records which were required for each client. The Psychological Profile was designed to interpret the testing situation rather than just test results.

The Psychological Profile

The Psychological Profile is included in Appendix C in the form of a reprint, from New Outlook for the Blind,[3] of an actual case with all identifying factors changed or removed.

The Profile was designed to present the information from the testing situation to the vocational rehabilitation counselor and Lighthouse staff in a form which they could easily and accurately understand and utilize. It actually consists of an 8 1/2 by 11 inch hard cover booklet for each client. There are eight parts:

1. Assets --The mental, physical, personal, and vocational assets of the client.

2. Liabilities--The mental, physical, personal, and vocational liabilities of the client.

3. Comparative Chart--A Comparative Chart which graphically shows the client's relative strengths and weaknesses in terms of his various test scores. There is a Verbal Scale for the counselor without any knowledge of testing, a Percentile Scale for the counselor with a minimum of testing or statistical background, and a Standard Scale for the specially trained counselor or psychologist. Raw, percentile, and standard scores are given for the tests.

The comparison lines for each test are automatically and simultaneously aligned with all other tests on all scales. Thus at a glance one can see the relative strengths

---

[3]Martin Dishart, "Testing the Blind for Rehabilitation Using a Psychological Profile," New Outlook for the Blind, Vol. 53, No. 1 (January, 1959), pp. 1-14.

and weaknesses of all test scores. However persons using the Comparative Chart are cautioned that "any comparison of the scores on different tests must consider the norms of each test."

4. Integration and Interpretation of Test Results--This consists of an integration and interpretation of all available information. This section also explains factors which may enhance or inhibit the client's performances as well as any possibilities to increase his abilities or employability.

5. Recommendations--These recommendations are for consideration by the client's rehabilitation counselor and may include anything pertinent to rehabilitation.

6. Appendix 1.--This section contains test details and technical information as well as the behavior of the client during each test.

7. Appendix 2.--This consists of a booklet written for the rehabilitation counselor. It gives the references, norms, and other data for each test. Also it provides basic information about some of the things to do and, especially, what not to do with test results.

8. Personal data of the client are included on the front page. There is always a capitalized note to consult the client's complete medical records.

The entire booklet is enclosed in hard covers with only the client's name and the printed table of contents on the front. It is clearly marked "confidential" on front and inside. It further cautions, "this report is confidential and should be read only by persons who are qualified and authorized."

The Tests

The following seven tests made up the four parts of the Psychological Profile battery. Included are references to the respective manuals used for the administration, interpretation, and norms of each test.

A. Intelligence Test

Wechsler Adult Intelligence Scale (WAIS), Verbal Scale[4]

B. Personality Inventory

Emotional Factors Inventory (8 scales)[5]

1. Sensitivity
2. Somatic Symptoms
3. Social Competency
4. Paranoid Tendencies
5. Feelings of Inadequacy
6. Depression
7. Attitudes regarding Blindness
8. Validation

C. Manual Dexterity Tests

1. Minnesota Rate of Manipulation[6]

   a. Displacing Test
   b. Turning Test

---

[4]David Wechsler, Manual for the Wechsler Adult Intelligence Scale (New York: Psychological Corp., 1955); David Wechsler, The Measurement and Appraisal of Adult Intelligence (4th ed.,; Baltimore: Williams and Wilkins Co., 1958).

[5]Mary K. Bauman, "A Comparative Study of Personality Factors in Blind, Other Handicapped, and Non-Handicapped Individuals," A study prepared for the Personnel Research Center, Philadelphia, 1950. (Mimeographed.)

[6]Educational Test Bureau, Minnesota Rate of Manipulation Test (Examiner's Manual) (Minneapolis: Educational Test Bureau, Educational Publishers, Inc., 1946); John E. Roberts and Mary K. Bauman, Motor Skills Tests Adapted to the Blind, Minnesota Rate of Manipulation Test; Pennsylvania Bi-Manual Worksample (Minneapolis: Educational Test Bureau, Educational Publishers, Inc., 1944).

2. Pennsylvania Bi-Manual Worksample[7]
   a. Assembly and throw in box
   b. Assembly Test
   c. Disassembly

3. Crawford Small Parts Dexterity Test, Part II[8]

4. Purdue Pegboard Tests[9]
   a. Right Hand (1 trial)
   b. Left Hand (1 trial)
   c. Both Hands (1 trial)
   d. "R+L+B"
   e. Assembly (1 trial)

D. Achievement Test

Wide Range Achievement Test, Spelling Grade[10]

The author, publisher, source of adaptation, norms and detailed descriptions of each test are included in Appendix C.

This writer's sources of information and personal instructions in the correct use of each test with blind persons were described in Chapter III, pp. 44-45.

As stated in detail in Chapter III:

1. Norms for the Sighted--were used for all tests except the Emotional Factors Inventory. Thus clients could be compared with standardization groups of sighted people similar to those with whom they would have to compete for jobs.

---

[7]John R. Roberts and Mary K. Bauman, Motor Skills Tests Adapted to the Blind, Minnesota Rate of Manipulation Test; Pennsylvania Bi-Manual Worksample (Minneapolis: Educational Test Bureau, Educational Publishers, Inc., 1944); John R. Roberts, Pennsylvania Bi-Manual Worksample (Examiner's Manual) (Minneapolis: Educational Test Bureau, Educational Publishers, Inc., 1945).

[8]John E. Crawford and Dorothea E. Crawford, Crawford Small Parts Dexterity Test (New York: Psychological Corp., 1956); Mary K. Bauman and Samuel P. Hayes, A Manual for the Psychological Examination of the Adult Blind (N.Y.: Psychological Corp., 1951).

[9]Purdue Research Foundation, Examiner Manual for the Purdue Pegboard (Chicago: Science Research Assoc., 1948); James W. Curtis, "Administration of the Purdue Pegboard Test to Blind Individuals," Educational and Psychological Measurements, Vol. 10 (1950), pp. 329-31.

[10]Joseph Jastak, Wide Range Achievement Test (Spelling) (Wilmington, Delaware: Chas. L. Story Co., 1946).

2. The Clinical Use of Testing Information--the total testing situation was taken into consideration. Influences on performances and any other pertinent information were included in the "Integration and Interpretation of Test Results".

3. Testing as Part of Total Services--An attempt was made to relate testing information maximally to total services through the use of conferences with the rehabilitation counselors and Lighthouse staff.

Contents of the Psychological Profile

The contents of the Psychological Profiles naturally depended upon the information pertinent to each client. As pointed out in the reprint of the sample Profile in Appendix C, there is no such thing as a "typical case." However, 24 items representing six "areas of information" were included in all the profiles. But, it should be made clear that these 24 items were not supposed to encompass their respective areas, only to represent them. Also the reason these 24 items were always included was that they represented the 24 factors evaluated at the Columbia Lighthouse. Since most of the tested clients went there, and since these items were considered essential by the rehabilitation counselors and Lighthouse staff for whose use the profile was designed, these items were included.

The six "areas of information" with their respective 24 items are:

I. General Intellectual Assessments
   1. General learning ability.
   2. Knowledge of general information.
   3. Situational and social reasoning ability.
   4. Arithmetical ability.

5. Simple rote memory.

6. Complex rote memory.

7. Abstract and/or conceptual reasoning ability.

8. Verbal expressiveness.

II. Academic Assessments

9. General academic (school) level

III. Manual Dexterity Strengths and Weaknesses

10. General learning of manual directions.

11. Workspace and workspot orientation ability.

12. Over-reliance on vision.

13. Tactual perception.

14. Use of tactual perception.

15. Tip of finger dexterity.

16. Bi-manual coordination.

17. Gross movements.

18. Use of small tool.

19. Deftness with small objects and areas versus large objects and areas.

20. General work habits.

IV. 21. General Personality Assessments (including the prediction of personality problems)

V. Vocational Assessments and Predictions.

22. Evaluation of client's vocational motivation.

23. Evaluation of practicality of client's vocational plans.

VI. Recommendations.

24. Recommendations regarding client's vocational goals.

Sources of the Profile Contents

The sources of information for the 24 items varied with the area of information as well as with each case. Many of the items could be found in performances on several tests. Some of the items were frequently derived from the above-mentioned interview situation. Influences on the individual's performances were also important. And since the total testing situation was always considered, no simple schematic explanation can be given for sources of the Profile contents--especially since there might be different sources for different cases. However, the following general considerations for each area may be thought of as a framework within which information for the items was derived.

I. General Intellectual Assessments--were based rather closely on the subtests of the WAIS as follows:

1. General learning ability	WAIS Verbal I. Q.
2. Knowledge of general information	WAIS Information
3. Situational and social reasoning ability.	WAIS Comprehension
4. Arithmetical ability	WAIS Arithmetic
5. Simple rote memory	WAIS Digits Forward
6. Complex rote memory	WAIS Digits Backward
7. Abstract and/or conceptual reasoning ability	WAIS Similarities
8. Verbal Expressiveness	WAIS Vocabulary

II. Academic Assessments

9. General academic (school) level--considered Wide Range Achievement Test, WAIS Arithmetic, Information, and Vocabulary, and highest school grade.

III. Manual Dexterity Strengths and Weaknesses

10. General learning of manual directions--Minnesota Turning and Purdue Assembly.

11. Workspace and workspot orientation ability--Minnesota Displacing, Crawford, Purdue "R+L+B"

12. Over-reliance on vision--Crawford, Minnesota Displacing, Purdue "R+L+B".

13. Tactual perception--Crawford and Purdue.

14. Use of tactual perception--Crawford and Purdue.

15. Tip of finger dexterity--Crawford, Purdue, and Pennsylvania Bi-Manual Assembly.

16. Bi-Manual Coordination--Pennsylvania Bi-Manual Assembly and Minnesota Turning.

17. Gross movements--Minnesota Turning, Minnesota Displacing, Pennsylvania Disassembly.

18. Use of a small tool--Crawford Part II.

19. Deftness with small objects and areas versus large objects and areas--Crawford and Purdue versus Minnesota Turning and Displacing.

20. General work habits--all, but especially trial 2 of Pennsylvania Bi-Manual which is somewhat fatiguing and Purdue which lends itself to easy cheating.

IV. 21. General Personality Assessments (including the prediction of personality problems) --Emotional Factors Inventory for clues or trends, general behavior, and the interview situation.

V. Vocational Assessments and Predictions

22. Evaluation of client's vocational motivation --Interview, task behavior on Pennsylvania Bud trials, and personal data.

23. Evaluation of practicality of client's vocational plans--interview situation, but considering relationship of plans to strengths and weaknesses shown on tests; also medical records.

VI. 24. Recommendations regarding client's vocational goals--Interview situation, but also test performances, education, vocational experience, medical records, and especially the client's desires.

It should again be emphasized that the above is just a broad framework within which Profile item information was considered--often to a large extent, but sometimes nearly not at all.

For example, the tests which would best indicate information for manual dexterity items would often depend upon the degree and type of residual vision. Thus the Minnesota tests might be better for determining the quality of workspace orientation, over-reliance on vision, and use of tactual perception for a client with macula vision (good vision in a very narrow field) while these same items could be better determined by the Crawford and Purdue tests for another client with some residual high myopic vision. The same kind of thing can be said of the other areas of information. Tests and the interview situation supplied information about a total picture which, in the last

analysis, had to be presented by the examiner's interpretations. Or, as DiMichael[11] put it, "In order to make a 'psychological evaluation,' one must be able to get beneath the psychometric results and to understand the influence producing them."

Design to Evaluate Testing Services

The evaluation of testing services for 55 clients was conducted through a comparison of the 24 items in their Psychological Profiles with the two sources of validity criteria. One source was the Lighthouse staff and their final reports; the other source was the respective vocational rehabilitation counselors and their official records.

Also, the helpfulness of testing services, and the amount of information, in each "area" was evaluated for 93 clients by their respective vocational rehabilitation counselors.

Evaluations of Testing by the Lighthouse Staff

Using each client's final tenth week report as a validity criterion, the Lighthouse staff evaluated the 24 items in his Psychological Profile. Thus they could compare the predictive value for each item, on the basis of six hours of testing, with what was actually found for the item after 10 weeks of evaluation.

---

[11] Salvatore G. DiMichael, Psychological Services in Vocational Rehabilitation (Washington, D. C.: Department of HEW, Office of Vocational Rehabilitation, 1959).

They used the same procedure for arriving at their judgments that was described on page 89 for counseling. That is, democratic discussions with majority vote decisions, in the same way that they evaluated professionally for the District of Columbia and Maryland.

Questionnaire, Items, and Scoring Scale

The following directions were read to the Lighthouse staff:

> We would appreciate your help in the evaluation of our testing program. Please indicate the extent to which your final tenth week reports agree or disagree with (client's name)'s Psychological Profile for the following factors:

The items in the questionnaire were the same above-mentioned 24 items which appeared in the Psychological Profiles and the final reports. (The questionnaire is included in Appendix A under the heading, "Columbia Lighthouse Staff's Evaluation of Test Battery Information--A Comparison of Profile Factors with Final Reports.")

The staff judged the extent to which each of the 24 items in the Psychological Profile compared with the final report, as follows:

> It greatly agrees.
> It generally agrees.
> It's not comparable or I don't know.
> It generally disagrees.
> It greatly disagrees.

The same scoring scale and indices were used that were used for the counseling evaluations.

+2 for "It greatly agrees."
+1 for "It generally agrees."
0 for "It's not comparable" or "I don't know."
-1 for "It generally disagrees."
-2 for "It greatly disagrees."

The staff were instructed to judge the five point scale according to equal intervals for both the testing and counseling questionnaires which actually were done at the same time.

Evaluation Criteria of the Lighthouse Staff

The evaluation criteria used by the Lighthouse staff were their final reports on each client based on ten weeks of evaluations. These reports were not done for this study but rather were professional evaluations for the District of Columbia and Maryland Departments of Vocational Rehabilitation according to P. L. 565. The things evaluated in the reports included the same 24 items that were in the Profile whose purpose it was to predict prior to services. For this study, the staff used their usual team judgmental procedures to decide to what extent the Profile items agreed or disagreed with their final reports.

The same attitudes and motivation to give "best judgments" prevailed for testing as for counseling. Also, as with counseling, the staff and this writer agreed that it would be less accurate to attempt to judge on more than a five point scale, i.e. two points in each direction. This was especially true since a more definitive judgment would be complicated by the fact that the 24 items were within the texts of the staff reports and not listed separately. Thus

the staff could decide if the test item agreed or disagreed "generally" or "greatly"; but additional categories would have been less accurate.

Evaluations of Testing by the Vocational Rehabilitation Counselors

There were five vocational rehabilitation counselors, three from Maryland and two from the District of Columbia. Each client's respective vocational rehabilitation counselor evaluated the 24 testing items in terms of their six "areas of information." The validity criterion with which each area was compared was the rehabilitation counselor's professional judgment. He considered his official records and knowledge of the client since testing and in prevocational and vocational situations.

The Questionnaire, Items, and Scoring Scale

The following was read to each rehabilitation counselor:

> We would appreciate your evaluation of our testing services for blind clients. What is your opinion of having had the following information, contained in the Psychological Profile, in your counseling of (client's name)?

The items in the questionnaire were the same six "areas of information" described above. These were:

1. General Intellectual Assessments
2. Academic Assessments
3. Manual Dexterity Strengths and Weaknesses
4. General Personality Assessments

5. Vocational Assessments and Predictions

6. Recommendations

To make sure the counselors knew what to judge, and that they each judged the same things, a table of definitions was given for each "area of information."

These definitions were the same, verbatim items, which the Lighthouse staff evaluated according to their final reports. Thus, by definition, the Lighthouse staff and rehabilitation counselors evaluated the same items. However, they evaluated them according to different validity criteria.

The same five point scale and indices were used for the rehabilitation counselors as for the Lighthouse staff. Thus for each "area of information," the counselor indicated the following for 55 clients:

The information was very true.
The information was generally true.
I don't know.
The information was generally untrue.
The information was very untrue.

The counselor also was instructed to use equal scale intervals. Therefore the following are directly comparable in that they relate to the same things.

Score	Lighthouse Evaluations	Rehabilitation Counselor Evaluations
+2	"It greatly agrees."	"The information was very true."
+1	"It generally agrees."	"The information was generally true."
0	"Not comparable" or "I don't know."	"I don't know."
-1	"It generally disagrees."	"The information was generally untrue."
-2	"It greatly disagrees."	"The information was very untrue."

These all represent evaluations of the same information in the Psychological Profile. However, different validity criteria were used.

Additional Evaluations by the Rehabilitation Counselors

The respective rehabilitation counselors also evaluated the tests of 93 clients. They evaluated seven types of information regarding its helpfulness to vocational rehabilitation counseling and the desired amount of such information. The seven "types of information" were:

1. General Intellectual Assessments.
2. Academic Assessments.
3. Manual Dexterity Strengths and Weaknesses.
4. General Personality Assessments.
5. Vocational Assessments.
6. Vocational Predictions.
7. Recommendations.

As can be seen, category 5. and 6. were one "area of information." This area was divided to make the following judgments easier for the counselor. These judgments were not made by the Lighthouse staff. They were made only by the rehabilitation counselors.

Each of the seven types of information, defined by the 24 items as shown previously, was evaluated as follows:

This information made counseling:

much more helpful to the client.
more helpful to the client.
neither more nor less helpful to the client.
less helpful to the client.
much less helpful to the client.
I don't know.

Each of the seven types of information were also evaluated as follows:

There should have been more of such information.
There should have been less of such information.
The amount of such information was just right.

These "additional evaluations" were made only by the rehabilitation counselors. The 93 clients included 38 who did not go to the Lighthouse. Indices were not used here and tabulations were in percentages as described in the chapter on "results."

(The counselor's questionnaire is included in Appendix A under the heading, "Rehabilitation Counselor's Evaluation of Test Battery Information".)

Evaluation Criteria of the Rehabilitation Counselors

The rehabilitation counselors evaluated the same things evaluated by the Lighthouse staff, but according to different validity criteria. The staff worked more intensively with the client, and knew more about him, but only in the Lighthouse and while he was in their program. The rehabilitation counselor had a broader knowledge of the client and knew him longer and in different settings, especially vocational ones. And of prime importance, the counselor knew what

happened to the client since testing while the staff only knew him between testing and graduation.

Therefore the counselors and Lighthouse staff had different perspectives of the client which could be used to evaluate the testing information. The counselor's knowledge and records could consider what the Lighthouse final reports could not; just as the intensive knowledge in the Lighthouse reports could not be duplicated by the counselors. In keeping with their respective kinds of knowledge about the clients, the Lighthouse staff judged items whereas the counselors judged "areas" which were defined by the items.

The "additional evaluations" by the rehabilitation counselors are limited in value in that there are no other sources of such evaluations for comparison. This could not be helped since the 93 clients did not go to the Lighthouse. However, it was felt, that even though limited in value, these additional evaluations could supply important information and were well worth doing.

CHAPTER V

RESULTS AND STATISTICAL FINDINGS

Following are the results of three sources of evaluations for counseling services and two sources of evaluations for testing services.

Psychological Counseling Services

There were three kinds of psychological counseling services, all conducted by this writer. The 60 subjects were "legally blind" adults in the Columbia Lighthouse rehabilitation program. They received weekly group counseling, individual counseling, and group counseling for their relatives.

The effects of the three counseling services on each client were evaluated by the client, his respective vocational rehabilitation counselor, and the Lighthouse staff. Rehabilitation counselors and the Lighthouse staff evaluated the effects of counseling upon five "areas of adjustment," each area defined by five items of adjustment. Clients evaluated for the items directly. (Details in Chapter IV.)

TABLE I

THREE SOURCES OF EVALUATIONS OF THE EFFECT OF COUNSELING SERVICES UPON 60 "LEGALLY BLIND" ADULTS IN FIVE AREAS OF PERSONAL ADJUSTMENT FOR VOCATIONAL REHABILITATION (EVALUATIONS BY MEAN INDEXES*)

	Sources of Evaluations		
Areas of Adjustment	The 60 Subjects	Lighthouse Staff	Rehabilitation Counselors
A. Emotional Adjustment	1.34	0.97	1.38
B. Social Abilities	1.29	0.62	1.40
C. Unwarranted Fears, Nervousness, or Depression	1.29	0.80	1.32
D. Attitudes Regarding Handicap(s)	1.26	0.68	1.10
E. Vocational Preparation (attitudes, plans, goals, motivation, and action)	1.27	0.57	1.30
Mean Total Index	1.29	0.71	1.30

*Using a range of +2 for maximal helpfulness and -2 for maximal hindrance.

Table 1 shows evaluations for the five "areas of adjustment" by the 60 subjects, their respective rehabilitation counselors, and the Lighthouse staff.

All evaluations are represented by indices using a range of +2 for maximally helpful counseling effects and -2 for maximally hindering counseling effects.

Table 1 shows that all three sources ascribed helpful effects to the counseling services in all five areas of adjustment. They did not think the couseling services had an over-all hindering effect on any area.

Indices for judgments by the 60 subjects ranged from a high of 1.34 for area A, Emotional Adjustment, to a low of 1.26 for area D, Attitudes Regarding Handicap(s), with 1.29 for area B, Social Abilities, 1.29 for area C, Unwarranted Fears, Nervousness, or Depression, and 1.27 for area E, Vocational Preparation. The mean total index for the 60 subjects was 1.29.

Relatively closely related to the subjects' indices were those of the rehabilitation counselors. Their high was 1.40 for area B while area D was their low with 1.10; areas A, C, and E had 1.38, 1.32, and 1.30 respectively. The counselors' mean total index of 1.30 was strikingly close to that of the clients.

Although all positive, the Lighthouse staff's evaluation indices were consistently much lower than the other two sources for all areas. Their high score was only 0.87, for area A, while their low was 0.57 for area E, with 0.62, 0.60, and 0.68 for areas B, C, and D respectively. Their mean total index was 0.71.

Table 2 shows the reliability of the mean indices in terms of the standard deviations <u>within each area</u>. Also shown is the standard deviation for the mean total index of each source. However, this represents the deviations <u>among the</u>

mean indices of the five areas for each source.

TABLE 2

RELIABILITY OF THE MEAN INDEXES OF TABLE 1 IN TERMS OF STANDARD DEVIATIONS

	Sources of Evaluations					
	The 60 Subjects		Lighthouse Staff		Rehabilitation Counselors	
Areas of Adjustment	Mean Index	S.D.	Mean Index	S.D.	Mean Index	S.D.
A.	1.34	.49	0.87	.39	1.38	.72
B.	1.29	.40	0.62	.49	1.40	.69
C.	1.29	.41	0.80	.44	1.32	.72
D.	1.26	.39	0.68	.47	1.10	.86
E.	1.27	.46	0.57	.50	1.30	.83
Mean Total Index	1.29	.03	0.71	.12	1.30	.13

The standard deviation for within each area of adjustment was very high, because a S.D. is especially influenced by extreme deviations and the individual judgments from each source were mostly positive with only a few negatives. However, the standard deviations for the mean total indices were very low because the three sources had relatively consistent mean indices for their respective five areas.

For the 60 subjects, Table 2 shows that the standard deviations (S.D.) are .49, .40, .41, .39, and .46 for areas A through E respectively. The S.D. for the mean total index is a very low .03.

The Lighthouse staff had S.D.'s of .39, .49, .44, .47, and .50 respectively for the five areas. These were closer to the subjects' S.D.'s than to those of the rehabilitation counselors. However the S.D. for the staff's mean total index is the same as that of the counselors, .13, indicating greater variability among the mean indices of the staff and counselors than for the clients.

The standard deviations for the mean indices of the rehabilitation counselors were considerably higher than those of the other two sources. The lowest, for area B, comprises 17% of the range of the index itself; added to the mean index of 1.40, the S.D. of .69 would exceed the range. The other S.D.'s are .72, .73, .86, and .83 for areas A, C, D, and E respectively. It will be noted that one positive S.D. would exceed the range for all areas except D.

Thus, although the mean indices for subjects and rehabilitation counselors were similar, the variability within counselors' judgments greatly exceeded the variability for the other two sources. However the variability among the mean indices for the five areas was relatively very low for all sources with the S.D. for the subjects at only .03.

Tables 3, 4, and 5 show the evaluations of the effects of counseling by the 60 subjects grouped according to sex, race, and degree of blindness respectively.

Table 3 shows evaluations of the effects of counseling by the 60 subjects divided by sex.

TABLE 3

EVALUATIONS BY 60 "LEGALLY BLIND" ADULTS OF THE EFFECTS OF COUNSELING SERVICES UPON FIVE AREAS OF THEIR PERSONAL ADJUSTMENT FOR VOCATIONAL REHABILITATION (MEAN INDEXES* BY SEX)

	Sex	
Areas of Adjustment	Male	Female
A. Emotional Adjustment	1.35	1.32
B. Social Abilities	1.24	1.36
C. Unwarranted Fears, Nervousness, or Depression	1.28	1.32
D. Attitudes Regarding Handicap(s)	1.23	1.30
E. Vocational Preparation (attitudes, plans, goals, motivation, and action)	1.24	1.33
Mean Total Index	1.27	1.32
No. of Subjects	38	22

*Using a range of +2 for maximal helpfulness and -2 for maximal hindrance.

The table indicates relatively little difference in the mean indices of the 38 male and 22 female subjects. Indices were somewhat higher for the females with a range of 1.30 to 1.36 and a mean total index of 1.32. For males, the range was 1.23 to 1.35 for the five areas with a mean total index of 1.27. Although area D, Attitudes Regarding Handicap(s) was lowest for each sex, the variation among the areas was

insignificant. Thus there was little difference in the effects of counseling on the two sexes or in comparing the areas of adjustment.

Table 4 shows evaluations of the effects of counseling by the 60 clients divided by race.

TABLE 4

EVALUATIONS BY 60 "LEGALLY BLIND" ADULTS OF THE EFFECTS OF COUNSELING SERVICES UPON FIVE AREAS OF THEIR PERSONAL ADJUSTMENT FOR VOCATIONAL REHABILITATION (MEAN INDEXES* BY RACE)

	Race	
Area of Adjustment	White	Negro
A. Emotional Adjustment	1.00	1.43
B. Social Abilities	1.11	1.34
C. Unwarranted Fears, Nervousness, or Depression	1.20	1.32
D. Attitudes Regarding Handicap(s)	1.17	1.28
E. Vocational Preparation (attitudes, plans, goals, motivation, and action)	1.09	1.32
Mean Total Index	1.11	1.34
No. of Subjects	13	47

*Using a range of +2 for maximal helpfulness and -2 for maximal hindrance.

This table shows consistently higher indices, in every area of adjustment, for the 47 Negroes than for the 13 white clients. Thus it would appear that counseling services helped the Negroes more than the 13 white clients in all 5 areas of adjustment.

The greatest difference in Negro and white indices was for Emotional Adjustment where Negroes had their highest index and whites their lowest. The next greatest differences were for the areas of Social Abilities and Vocational Preparation where whites had their next lowest indices and Negroes their next highest. Areas C and D have relatively smaller differences between the races. The mean total indices were 1.11 for whites and 1.34 for Negroes.

Thus Table 4 showed that both races were helped in all areas but that the Negroes were helped more, especially in Emotional Adjustment, Social Abilities, and Vocational Preparation. However all comparisons should consider the unequal distribution of subjects, 47 Negroes compared with only 13 white clients.

Table 5 shows evaluations of the effects of counseling by the 60 subjects divided by degree of "legal blindness."

TABLE 3

EVALUATIONS BY 60 "LEGALLY BLIND" ADULTS OF THE EFFECTS OF COUNSELING SERVICES UPON FIVE AREAS OF THEIR PERSONAL ADJUSTMENT FOR VOCATIONAL REHABILITATION (MEAN INDEXES* BY DEGREE OF "LEGAL BLINDNESS")

	Degree of "Legal Blindness"			
Areas of Adjustment	Total Blindness	Light Perception[a]	Motion Perception[b]	Traveling Sight[c]
A. Emotional Adjustment	1.49	1.37	1.03	1.33
B. Social Abilities	1.47	1.34	1.13	1.23
C. Unwarranted Fears, Nervousness, or Depression	1.44	1.40	1.07	1.24
D. Attitudes Regarding Handicap(s)	1.42	1.35	1.07	1.19
E. Vocational Preparation (attitudes, plans, goals, motivation, and action)	1.53	1.31	1.03	1.21
Mean Total Index	1.47	1.35	1.07	1.24
No. of Subjects	11	13	6	30

*Using a range of +2 for maximal helpfulness and -2 for maximal hindrance.

[a]Light perception or light projection only.

[b]Ophthalmologically defined as under 5/200 or greater than 99.9% loss.

[c]Ophthalmologically defined by ranges of 5/200 to 20/200 or 99.9% to 80.0% loss.

Table 5 indicates that there were differences in indices of the helpfulness of counseling for all five areas when the subjects were divided by degrees of "legal blindness." Thus the table shows that all were helped but:

(a) The totally blind clients were helped the most.

(b) Clients with only "light perception"[1] were helped to the second greatest extent.

(c) Next came clients with "traveling sight."[2]

(d) Clients with "motion perception"[3] were helped the least.

Reasons for the relationship between indices and relative degrees of blindness will be discussed in detail in the chapter titled "Discussion."

Mean total indices, as well as all five areas, followed the above descending relationship according to degree of blindness. Thus the mean total indices were 1.47, 1.35, 1.24, and 1.07 for the 11 totally blind, 13 light perception, 30 traveling sight, and 6 motion perception subjects respectively.

---

[1]Light perception or light projection only.

[2]Ophthalmologically defined by ranges of 5/200 to 20/200 or 99.9% to 80.0% loss.

[3]Ophthalmologically defined as under 5/200 or greater than 99.9% loss.

Three of the things which will be discussed in the next chapter should at least be mentioned here in order to put these results in clearer perspective. Firstly, subjects who had no vision, the least useful, and the most useful vision were helped the most by counseling; in these three groups, those with more vision were helped less. But clients who had slightly useful vision, i.e. those with motion perception, were helped the least.

Secondly, these categories of degree of blindness were not designed for this study. Rather they are the ones generally utilized in ophthalmological and vocational rehabilitation considerations.[4] Thirdly, the different number of subjects in each category, especially "motion perception," reduced the significance of any differences.

In addition to the above-mentioned relationships for indices and degrees of blindness, it is noteworthy that the areas of Emotional Adjustment and Vocational Preparation were lowest for Motion Perception and highest for Total Blindness thus showing reversals in areas maximally and minimally helped as well as in the degree of such help.

Table 6 indicates which of the three counseling services was considered "most helpful" in each area of adjustment by percentages of the judgments of 35 subjects. This

---

[4]Mary K. Bauman, Adjustment to Blindness (Harrisburg, Pa.: State Council for the Blind, Commonwealth of Pennsylvania, 1954); Mary K. Bauman and Samuel P. Hayes, A Manual for the Psychological Examination of the Adult Blind (New York: Psychological Corp., 1951).

TABLE 6

JUDGMENTS BY 35 "LEGALLY BLIND" ADULTS OF THE MOST HELPFUL OF THREE TYPES OF COUNSELING SERVICES IN FIVE AREAS OF THEIR PERSONAL ADJUSTMENT FOR VOCATIONAL REHABILITATION (EXPRESSED BY PERCENTAGES OF THE TOTAL JUDGMENTS)

Areas of Adjustment	Type of Counseling Service			
	Percentage Weekly Group Counseling	Percentage Weekly Individual Counseling	Percentage Group Counseling for Relatives	Percentage None Helped or Don't Know
A. Emotional Adjustment	48.0	41.7	4.0	6.3
B. Social Abilities	50.3	30.9	9.1	9.7
C. Unwarranted Fears, Nervousness, or Depression	50.3	39.4	6.3	4.0
D. Attitudes Regarding Handicap(s)	48.6	40.0	5.1	6.3
E. Vocational Preparation (attitudes, plans, goals, motivation, and action)	50.9	42.6	2.3	4.6
Geometric Mean Total Percentage	49.5	38.7	4.9	5.9
Judgments of over-all "Most Valuable" Counseling Service	37.1	54.3	8.6	0.0

was based on the number of the 25 adjustment items for which each service was judged "most helpful." The table also shows which counseling service subjects judged the over-all "most valuable" to them.

Table 6 shows that for all five areas, group counseling was considered the "most helpful" for the largest number of adjustment items. This was represented by 48.0%, 50.3%, 50.3%, 48.6%, and 50.3% of the judgments for areas A through E respectively with a geometric mean total of 49.5% and a range of only 2.3%.

Individual counseling was chosen the "most helpful" counseling service for the second highest number of adjustment items. The range here was 30.9% for area B and 42.9% for area E with 41.7%, 39.4% and 40.0% for areas A, C, and D respectively. The geometric mean total was 38.7%.

The relatives' group was chosen "most helpful" for the smallest number of adjustment items helped, in every area. It was indicated for 4.0% of the items in area A, 9.1% in area B, with 6.3%, 5.1%, and 2.3% of the items for areas C, D, and E respectively. The geometric mean total was 4.9%.

The percentage of items to which subjects responded "none helped" or "I don't know" were 6.3%, 9.7%, 4.0%, 6.3%, and 4.6% for areas A through E respectively with a geometric mean total of 5.9%.

Subjects' judgments of the over-all "most valuable" counseling service were especially significant. Whereas group counseling was judged "most helpful" for 49.5% of the

adjustment items, only 37.1% of the subjects thought it was the "most valuable" service.

But while individual counseling was judged most helpful for only 38.7% of the adjustment items, 54.3% of the subjects said it was their "most valuable" service.

Also, while some subjects said "none helped" or that they did not know which was the most helpful counseling service for 5.9% of the items, none of them voted "I don't know" or "none helped" for the most valuable service.

The relatives' group was thought "most valuable" by 8.6% of the subjects even though this service was judged the "most helpful" for only 4.8% of the items.

A comparison of the choices for the over-all "most valuable" counseling service with the "most helpful" for items reveals three important factors.

First: Some items of adjustment were apparently considered more important than other items. Thus the counseling service which was most helpful to the especially important items was probably chosen later as the "most valuable."

Second: Apparently the subjects thought group counseling helped the greatest <u>number</u> of items while a majority thought individual counseling was the most valuable.

Third: While some subjects said "none helped" or didn't know which service was the most helpful for 5.9% of the items, all subjects indicated some service which they thought was the most valuable; no subjects said that none of the counseling services were valuable.

Table 7 represents the judgments of the first 25 subjects who received the three counseling services at the Lighthouse. These subjects' evaluations were treated separately because individual counseling was not scheduled when they were in the program. It was available on the basis of clients seeing the counselor at irregular times. Since the service varied with each of the 25 subjects, it was not included in their questionnaire. However the clients' and relatives' groups were the same as for later subjects.

Table 7 shows that the 25 subjects overwhelmingly indicated that group counseling was "most helpful" for the greatest number of items; i.e. with a geometric mean total of 92.6% of the items and a range of only 91.2% to 93.6% for the five areas. Also, 92.0% of the subjects judged group counseling as the "most valuable."

Subjects judged the relatives' group most helpful to a geometric mean total of only 4.0% of the items with a range of 2.4% to 5.6% of the items for the five areas of adjustment. Eight per cent of the subjects thought it was the most valuable service.

Subjects said "none helped" or "didn't know" which of the two services was most helpful for a geometric mean total of 3.0% of the items. However none of the subjects indicated "I don't know" or "none helped" when deciding the most valuable service.

The most significant factor in Table 7 is that it did not include the individual counseling attention which the

TABLE 7

JUDGMENTS BY 25 "LEGALLY BLIND" ADULTS OF THE MOST HELPFUL OF TWO TYPES OF COUNSELING SERVICES IN FIVE AREAS OF THEIR PERSONAL ADJUSTMENT FOR VOCATIONAL REHABILITATION (EXPRESSED BY PERCENTAGES OF THE TOTAL JUDGMENTS)

Areas of Adjustment	Type of Counseling Service		
	Percentage Weekly Group Counseling	Percentage Group Counseling for Relatives	Percentage None Helped or Don't Know
A. Emotional Adjustment	92.8	4.0	3.2
B. Social Abilities	92.0	5.6	2.4
C. Unwarranted Fears, Nervousness, or Depression	91.2	4.0	4.8
D. Attitudes Regarding Handicap(s)	93.6	4.8	1.6
E. Vocational Preparation (attitudes, plans, goals, motivation, and action	93.6	2.4	4.0
Geometric Mean Total Percentage	92,6	4.0	3.0
Judgments of over-all "Most Valuable" Counseling Service	92.0	8.0	0.0

subjects received. Thus they were left with choices of only part of their services. This could not be helped because their individual counseling services varied and had to be omitted. But for this reason the results in Table 7 probably have limited value. However it does contribute two factors of some importance. Firstly, the subjects overwhelmingly thought that their group counseling was helpful, for the individual items and in terms of being most valuable. Secondly, all of the subjects thought at least one of the services had value, i.e. none of them said "none helped" or that they didn't know which was "most valuable."

Psychological Testing Services

Psychological testing services for 55 subjects were evaluated by two sources of validity criteria. The lighthouse staff compared 24 items, representing six "areas of information," in each client's Psychological Profile with the same items in their final reports. Each client's vocational rehabilitation counselor compared the six "areas of information," defined by the respective 24 items, with his official records, knowledge of the client since testing, and professional judgment.

The respective rehabilitation counselors also evaluated the Psychological Profiles of 93 subjects regarding the helpfulness to their counseling, and the desired amounts, of seven "types of information" defined by the respective 24 items as shown in Chapter IV.

Table 8 shows evaluations of the six "areas of information," in 55 subjects' Psychological Test Profiles, by the Lighthouse staff and respective rehabilitation counselors. Evaluations are represented by indices using a range of +2 for maximal agreement of the tests with their validity criteria and -2 for maximal disagreement.

TABLE 8

TWO SOURCES OF VALIDITY EVALUATIONS OF SIX AREAS OF INFORMATION IN THE PSYCHOLOGICAL TEST PROFILES OF 55 "LEGALLY BLIND" ADULTS (EVALUATIONS BY MEAN INDEXES*)

	Sources of Validity Evaluations	
Areas of Information	Lighthouse Staff	Rehabilitation Counselors
1. General Intellectual Assessments	1.52	1.87
2. Academic Assessments	1.71	1.88
3. Manual Dexterity Strengths and Weaknesses	1.56	1.73
4. General Personality Assessments	1.80	1.85
5. Vocational Assessments and Predictions	1.76	1.86
6. Recommendations	1.85	1.82
Mean Total Index	1.71	1.84

*Using a range of +2 for maximal validity and -2 for maximal disagreement with the source of validity.

This table indicates generally greater agreement between the tests and counselors' criteria than between the tests and Lighthouse staff's criteria. The mean total index of agreement for the staff is 1.71; for the rehabilitation counselors, it is 1.84.

Indices of counselors' evaluations are higher for all areas of information except Recommendations, area 6, where it is 1.82 for counselors and 1.85 for the staff. The greatest divergence is for area 1, General Intellectual Assessments, where it was 1.52 for the staff and 1.87 for counselors. Areas 2, 3, 4, and 5, for Academic Assessments, Manual Dexterity Strengths and Weaknesses, General Personality Assessments, and Vocational Assessments and Predictions respectively, were more consistent with 1.71, 1.56, 1.80, and 1.76 respectively for the staff compared with 1.89, 1.73, 1.85, and 1.86 for the counselors.

Thus all six areas of test information greatly agreed with staff and counselor validity criteria. However it agreed more with the counselors' criteria, especially General Intellectual Assessments. The only area where it agreed more closely with the staff's criteria was for Recommendations where the staff had their highest index.

Table 9 indicates the reliability of the mean indices in Table 8 in terms of the standard deviations <u>within each area</u>. Also included are the standard deviations among the mean indices of the six areas for each source.

TABLE 9

RELIABILITY OF THE MEAN INDEXES OF TABLE 8
IN TERMS OF STANDARD DEVIATIONS

	Sources of Validity Evaluations			
	Lighthouse Staff		Rehabilitation Counselors	
Areas of Information	Mean Index	S.D.	Mean Index	S.D.
1.	1.52	.38	1.87	.34
2.	1.71	.50	1.89	.31
3.	1.56	.35	1.73	.78
4.	1.80	.52	1.85	.49
5.	1.76	.40	1.86	.30
6.	1.85	.36	1.82	.39
Mean Total Index	1.71	.14	1.84	.06

The standard deviation for within each area of information was relatively high, because a S.D. is greatly influenced by extreme deviations and the individual judgments from each source were mostly positive with only a few negatives. However, the standard deviations for the mean total indices were relatively small because both sources, especially the counselors, had relatively consistent mean indices for their respective six areas.

The largest standard deviations for the Lighthouse staff's indices were .52 for area 4 and .50 for area 2 with

.38, .35, .40, and .36 for areas 1, 3, 5, and 6 respectively.

The largest standard deviation for indices of the rehabilitation counselors was .78 for area 3, Manual Dexterity Strengths and Weaknesses. The other S.D.'s were considerably smaller with .34, .31, .49, .30, and .39 for areas 1, 2, 4, 5, and 6 respectively.

The standard deviation for the mean total index of the Lighthouse staff was a relatively low .14; for the rehabilitation counselors it was a very low .06.

Table 10 indicates the extent to which the respective rehabilitation counselors thought the information in the Psychological Test Profiles made their counseling helpful to their clients. The seven "areas of information" were defined by the 24 test items as explained in Chapter IV.

The table shows that the rehabilitation counselors overwhelmingly thought the test information made their counseling more helpful. They said it made counseling "much more helpful" to a geometric mean total of 87.1% of the 93 subjects. The range here was from 84.9% for areas 6 and 7 to 90.3% for area 4, General Personality Assessments. They said it made their counseling "more helpful" to a geometric mean total of 11.6% of the 93 subjects. The range here was from 8.6% for area 4 to 15.1% for areas 6 and 7 with 10.8%, 14.0%, 9.7%, and 9.7% for areas 1, 2, 3, and 5 respectively.

Counselors indicated that the testing information made their counseling "neither more nor less helpful" to a geometric mean total of 2.0% of the 93 subjects.

TABLE 10

VOCATIONAL REHABILITATION COUNSELORS' EVALUATIONS OF THE HELPFULNESS TO THEIR COUNSELING, OF 93 "LEGALLY BLIND" ADULT CLIENTS, OF SEVEN TYPES OF INFORMATION IN EACH CLIENT'S PSYCHOLOGICAL TEST PROFILE (EXPRESSED BY PERCENTAGES OF THE TOTAL EVALUATIONS)

	Degree of Helpfulness to Counseling					
	Percentage		Neither	Percentage		
Areas of Information	Much More	More	More Nor Less	Less	Much Less	Don't Know
1. General Intellectual Assessments	89.2	10.8	0.0	0.0	0.0	0.0
2. Academic Assessments	86.0	14.0	0.0	0.0	0.0	0.0
3. Manual Dexterity Strengths and Weaknesses	86.0	9.7	3.2	1.1	0.0	0.0
4. General Personality Assessments	90.3	8.6	1.1	0.0	0.0	0.0
5. Vocational Assessments	88.2	9.7	2.1	0.0	0.0	0.0
6. Vocational Predictions	84.9	15.1	0.0	0.0	0.0	0.0
7. Recommendations	84.9	15.1	0.0	0.0	0.0	0.0
Geometric Mean Total Percentage	87.1	11.6	3.0[a]	1.1[b]	–[c]	–[c]

[a]Only for areas 3, 4, and 5.

[b]Only for area 3.

[c]Not applicable for any areas.

This geometric mean represented only areas 3, 4, and 5 with 3.3%, 1.1%, and 3.1% of the subjects respectively.

The only negative effects ascribed to the testing information was for area 3, Manual Dexterity Strengths and Weaknesses. They said the information of area 3 made their counseling "less helpful" to 1.1% of the 93 subjects.

There were no subjects whose counseling was made "much less helpful" and the counselors did not indicate "I don't know" for any catoogry.

Table 11 indicates the relative amount of each type of Profile information that the counselors desired for their clients.

Table 11 shows that the counselors thought the relative amounts of all types of information in the Profile were "just right" for their counseling of a geometric mean total of 96.9% of the 93 subjects. The range extended only from 95.7 to 97.8.

The rehabilitation counselors thought "there should have been more of such information" for a geometric mean total of 2.9% of the 93 subjects. The three types of information most desired were more General Personality Assessments, Vocational Assessments, and Vocational Predictions, but only for 4.3% of the subjects. More of the other four types of information was desired for 2.2% of the subjects.

Thus counselors felt that 2.2% of the subjects would have benefitted from more information of types 1, 2, 3, and

TABLE 11

VOCATIONAL REHABILITATION COUNSELORS' JUDGMENTS OF THE RESPECTIVE AMOUNTS OF SEVEN TYPES OF PSYCHOLOGICAL TEST PROFILE INFORMATION MOST DESIRABLE FOR THEIR COUNSELING OF EACH OF 93 "LEGALLY BLIND" ADULT CLIENTS (EXPRESSED BY PERCENTAGES OF THE TOTAL JUDGMENTS)

Types of Information	Desired Amounts of Test Profile Information		
	Percentage "There Should Have Been More"	Percentage "There Should Have Been Less"	Percentage "The Amount Was Just Right"
1. General Intellectual Assessments	2.2	0.0	97.8
2. Academic Assessments	2.2	0.0	97.8
3. Manual Dexterity Strengths and Weaknesses	2.2	0.0	97.8
4. General Personality Assessments	4.3	0.0	95.7
5. Vocational Assessments	4.3	0.0	95.7
6. Vocational Predictions	4.3	0.0	95.7
7. Recommendations	2.2	0.0	97.8
Geometric Mean Total Percentages	2.9	–[a]	96.9

[a]Not applicable.

7, that 4.3% would have benefitted from types 4, 5, and 6, while the amount of information was "just right" for all the rest.

The rehabilitation counselors did not think that "there should have been less" of any type of information.

CHAPTER VI

DISCUSSION

This discussion will first consider the counseling and testing services separately. Then it will consider the services together in terms of their relationships.

Psychological Counseling Services

The objective of this study was to evaluate counseling services received by blind rehabilitation clients. It would be redundant to merely decide if counseling services are good. Rather the problem was to evaluate what good, or harm, certain specified services did for certain subjects.

The subjects in this study were 80 adult "legally blind" clients in the Columbia Lighthouse rehabilitation program. The services were group, individual, and family counseling. Chapter IV specified the nature of the three services. Chapter II included the background pertaining to the services and their evaluation.

The literature generally agrees that there is yet no perfect way to isolate and measure the effects of counseling. The best that can be done is to evaluate those effects which

can be discerned, from as many vantage points as feasible, and to account for extraneous influences as well as possible.

There are many possible approaches which can be debated for their relative merits--as evidenced in the literature in Chapter II. But it all involves one basic issue. Which is primary, the study or the welfare of the subjects?

For purposes of research it is usually advantageous to have the study be the prime consideration. In this study the welfare of the blind subjects could not be subordinated to research design. As paraphrased on page 1, the director of the Lighthouse instructed this writer, "But remember that research must never displace or subordinate services to a single client. Our clients come first."

Therefore counseling services could not be given apart from the rest of the client's rehabilitation program. Undoubtedly the other services, such as "travel training," shop, Braille, and home economics affected adjustment along with counseling services. The objective was to evaluate the effects of the counseling services <u>in the rehabilitation program.</u>

It would have been difficult to evaluate the effects of the counseling services apart from the rehabilitation program. But more important, it would have been

invalid to do so because the counseling services were designed to help each client get as much as possible out of his rehabilitation program. Therefore the same counseling would have been different to the client if he were not in a rehabilitation program.

In other words, counseling services designed to help clients in a rehabilitation program must be evaluated as they exist in the program.

Thus experimental designs where subjects receive counseling and no other services, or have evaluated "wait" periods before counseling, have many advantages--but not for this study.

However the above reasons for this research design does not remove its problem of evaluating the effects of counseling amidst the effects of other services. This study dealt with the problem by utilizing what seemed like the best available evaluation sources--qualified judges. These were:

1. The Lighthouse staff.--They were qualified to judge the effects of counseling by virtue of their intensive associations and observations of the clients during the course of counseling and other services in the Lighthouse. Also they are highly recognized professional evaluators of these clients in this setting. In addition they had extensive final reports on each client and knew intimately the nature of all other services received at the Lighthouse.

2. Each client's vocational rehabilitation counselor.--They were qualified to judge the effects of counseling by virtue of their knowledge of the client before and after services. They also had personal data in their official records, especially of the client in vocational or pre-vocational situations.

3. The client himself.--This writer is a firm believer in the client's relative ability to know what is happening to him.

One of the most important things about the above three sources of evaluations is that they were able to evaluate from different perspectives; and their qualifications related to their respective vantage points. Thus the Lighthouse staff judged clients on the basis of knowing them intensively but only in the Lighthouse during the rehabilitation program.

The rehabilitation counselors knew their respective clients less intensively, but more extensively, especially in vocational situations. And most important, they knew the clients before and after the services with the possibility of follow-up considerations.

The client could see himself in all settings, all roles, and at all times. Subject to his introspective limitations, he could judge what the counseling services really meant to him.

In order to compare the evaluations of these three sources with validity, they had to evaluate the same things. Therefore five "areas of adjustment", of recognized importance for rehabilitation, were chosen. These five areas were each defined by five items of adjustment.

Clients judged the effects of counseling on the 25 items of adjustment. The Lighthouse staff and rehabilitation counselors judged the effects of counseling on the five areas as defined by their respective items. Thus the three sources judged the same things according to the same scales.

This study showed that the three sources of evaluation thought the counseling services were helpful in all areas and harmful in none. However the degree of helpfulness ascribed to the services varied with the source--but the variance was relatively consistent.

In terms of indices with +2 for maximal helpfulness and -2 for maximal hindrance, clients and counselors ascribed mean total indices of 1.29 and 1.30 respectively while the staff ascribed only 0.71.

Why the differences; and which should be used? These two questions have one reply. These three evaluations are from different sources and should be considered in terms of the perspective of each source. The Lighthouse staff judged the effects of counseling on the client they

knew during his 10 weeks rehabilitation program. The counselor judged the effects on the client he knew less intensively but more extensively. And the client--the only one who actually experienced the counseling--judged its effects on himself.

Thus it can be concluded that the three sources of evaluations ascribed definite helpfulness, in all evaluated "areas of adjustment", to the effects of counseling services on the 60 subjects. This is a statement of fact, not a prediction.

Concerning predictions, there are two further factors:

1. The very high standard deviations of all indices of evaluations give them little predictive reliability concerning the amount of helpfulness from counseling. Therefore it is reasonable to predict that similar subjects receiving similar counseling services in a similar setting will probably be helped somewhat and not hindered. But it cannot be reliably predicted how much they will be helped. Naturally this does not necessarily apply to different subjects, settings, or services.

2. The relatively low standard deviations for mean total indices suggest that if such a client is helped in one "area of adjustment" he would probably be judged as helped in the other areas by the three sources to the extent of + or - .03 by the client and + or - .12 by the staff or counselor respectively per S. D. of the index of

helpfulness. For example, if the rehabilitation counselor judged a client helped by counseling in area X to an extent of 1.30, the chances are about two out of three that the same counselor would judge the effects of counseling helpful to that client in the other four areas by indices between 1.18 and 1.42 (i.e. 1.30 ± .12). But if the client judged himself helped by 1.30, the chances are about two out of three that he would judge himself helped in the other four areas to the extent of 1.27 to 1.33 (i.e. 1.30 ± .03). However such predictions would be very tentative as well as limited in scope, especially since it would require "similar subjects".

In considering the differences of evaluations by male and female clients, there were no significant differences for these subjects.

However, there were differences when considering subjects by race. The 47 Negro subjects evaluated the effects of counseling upon themselves by higher indices for all five areas than did the 13 white subjects. Even though the unequal number of subjects greatly limited the significance of the degree of any differences, counseling did seem to help the Negro subjects more, especially in the areas of Emotional Adjustment, Social Abilities, and Vocational Preparation. No assumptions of reasons seem warranted for these differences; only guesses at possibilities. The three most likely guesses seem to be: (1) The Negro clients had greater

counseling needs in areas of emotional, social, and vocational adjustments than did the white clients. (2) "Acceptance" in the counseling situation of the Negroes by the white counselor increased positive effects. (3) The differences are due to the atypical representation of the 13 white clients when compared with the 47 Negroes.

This study showed that the 11 totally blind clients thought counseling helped them the most; next came 13 clients with light perception, then 30 with traveling sight, and the least help was indicated by 6 clients with motion perception. Thus when considering clients with no sight, practically useless light perception, and enough usable vision for traveling: the clients with more sight were helped less by counseling in all areas of adjustment. This seems explainable in that those with less vision had greater needs for adjustment and so were helped more or felt that they were helped more.

Then why did the 6 clients with motion perception indicate they were helped much less than anyone else? This writer doesn't know. But he will make the following guesses:

1. The clients with "motion perception" may have had unrecognized special problems in that they had vision which they couldn't really utilize. Thus they couldn't accept their conditions as completely as clients with no vision or traveling vision; i.e. they couldn't say "I'm blind" or "I still have useful vision".

2. Clients with motion perception may be "waiting" for their vision to improve, since only a little more would enable them to travel with it; e.g. light perception clients usually think of themselves as totally blind.

3. Motion perception clients may have been "left out" of the "in-groups" of Lighthouse clients. That is, they weren't "like us" to either blind or partially-sighted peers. The writer has no data on this.

4. The atypical indices may be due to other individual differences in the very small sample of only 6 subjects in this group.

It should be noted that the consistency of differences for all five areas of adjustment reflects the very small standard deviation among area indices for the subjects, i.e. only .03 as described previously.

Thus, regarding differences among the 60 subjects as a factor in their evaluation indices:

1. Sex made little difference.

2. The Negro subjects were helped more in all five areas of adjustment.

3. Subjects with less vision were helped proportionately more, in all five areas of adjustment. The exceptions were 6 subjects with "motion perception" who were helped least, possibly for certain special reasons.

Since the subjects received three kinds of counseling services, an important consideration was which service was the most helpful.

The study showed that 35 clients thought the group counseling was the most helpful for the greatest number of items but that individual counseling was "more valuable" even though it helped less items. Thus, while group counseling was most helpful for a mean total of 49.5% of the items it was considered "most valuable" by only 37.1% of the subjects. But even though individual counseling was judged most helpful for only 38.7% of the items, 54.3% of the clients thought it was the most valuable service.

There were no major differences among areas except for Social Abilities where a much greater number of items were helped by group counseling. The counseling of relatives was most helpful for 4.9% of the items and considered the most valuable service by 8.6% of the clients. Even though clients did not know or said "none helped" for 5.9% of the items, they all indicated that one of the services was most valuable.

Unfortunately, the above choices of counseling services of only 35 subjects could be studied. The other 25 subjects, the first ones at the Lighthouse, had irregular and non-scheduled individual counseling. Therefore individual counseling was omitted from their choices for most helpful and valuable.

This group of 25 subjects indicated that the group counseling helped 92.6% of the items. Furthermore 92.0% of the subjects voted it the most valuable service. The

other 8% thought the relatives group most valuable.

These evaluations of "most helpful" and "most valuable" yielded several important factors:

1. The subjects who had a choice of the three services felt that group counseling helped the greatest number of items while individual counseling was the most valuable. However a large minority, 37.1%, felt that group counseling was most valuable.

2. When individual counseling was eliminated from the choice, 25 subjects thought group counseling most helpful for 92.6% of the items and 92.0% of them thought it was most valuable. Conclusions for these 25 subjects are very limited however because (a) they could not account for their irregular individual counseling services. (b) Some of the things which would ordinarily have been dealt with in individual counseling may have been gone into during the group counseling of some subjects.

3. Over 8% of all 60 subjects thought that the group counseling of their relatives was the most valuable of their three services. Thus, even though the relatives' group helped a small number of clients, for them it was the most valuable counseling service.

4. All clients picked one of the services as the "most valuable." No client said he didn't know which was most valuable or that no service had value. Thus, even though subjects felt that certain items weren't helped by

counseling, its help for other items apparently made it valuable.

5. It is likely that certain adjustment items held greater values for some subjects than other items. Therefore the service which helped those most important items may later have been voted "most valuable" even though another service helped a greater number of items. It is also possible that choices of most valuable were influenced by the helpfulness of the chosen counseling service to items not included in the questionnaire.

6. There were no great differences among areas in the number of items helped by each service. Some differences were probably due mostly to obvious reasons, such as more items of Social Abilities being helped by group counseling or less items of Vocational Preparation being helped by the counseling of relatives.

Psychological Testing Services

The objective of this study was to evaluate six "areas of information" in the Psychological Profiles of 55 Lighthouse clients. The six areas, defined by 24 specific items, were evaluated by each client's vocational rehabilitation counselor using his official records, professional judgment, and knowledge of the client since testing. The 24 items were evaluated directly by the Lighthouse staff utilizing their final reports, which contained the 24 items, based on approximately ten weeks of evaluations. Thus the same things

were evaluated by two sources using different validity criteria.

The rehabilitation counselors also evaluated the extent to which the Profile information made their counseling more helpful to 93 clients and the desirable amounts of such information.

Chapter III presented the literature and research related to this writer's use of the present test battery. One of the major points was that in testing the disabled for purposes of rehabilitation, the test scores in themselves tell little. It is the interpretation of the test results and testing situation that is important. It is necessary to know the factors influencing a client's performances if he is to be effectively helped. Therefore the things evaluated in this study were not a group of test scores but rather the writer's use and presentation of testing information. This involved three things which were evaluated as a unit: (1) The testing information. (2) The writer's interpretation of the information. (3) The presentation of the information in the Psychological Profile.

These three things cannot be separated because the 24 items evaluated <u>were</u> the writer's interpretations in the Profile. The question might be asked, "Would the results of this study hold true for other subjects, other tests, another tester, or a different Profile form?"

Taken one at a time: the results might be expected to hold true for other subjects approximately to the extent

that they were similar to the 53 or 93 in these studies providing the testing conditions were the same. If different tests were used the results would be likely to differ to the extent that different information was revealed. Variance among qualified testers should be held to a minimum since these are very widely used tests with standardized instructions for comparing the blind client with sighted norms. Profile forms should be used to present, not interpret information; it is effective to the extent that it tells the user what the tester wanted it to tell.

The questions answered above actually refer to predictive values of the tests, about which the writer can only surmise. This study was mainly concerned with fact, the extent to which information in the Profiles agreed with the validity criteria. It is therefore important to consider why the criteria used should be considered valid.

The 24 items in the Lighthouse staff's reports should be considered "valid" because they were compiled and utilized by a highly qualified evaluation team during a period of approximately ten weeks as part of their professional evaluations for the District of Columbia and Maryland. Evaluations were of the specific 24 items pertaining to each subject in this study.

The rehabilitation counselor's official records, professional judgments, and knowledge of the client since testing should be considered "valid" because these criteria were also his tools for doing his vocational rehabilitation job with

the respective clients in this study. Thus his criteria are "valid" by virtue of his professional status and capacities.

However, it is very important to recognize that these criteria are not presented as being perfectly valid. (If they were, there would only be need for one!) Rather they are presented as the best available criteria which may be considered to have an important degree of validity. And, as stated in the section on counseling, the two sources of evaluations actually evaluated the items from different perspectives.

If it is found that testing for six hours could tell what it takes the Lighthouse staff ten weeks of full time evaluations to do, and the counselors even longer, then to that extent the tests can be used predictively for purposes of a more individualized rehabilitation program for each client. For example, if the Lighthouse could rely on knowing the 24 items about each client in advance, they could design a program to fit each client rather than fitting the client into a pre-set program.

It should be noted that presently the tests are used mainly for screening purposes; for example, to keep persons with extremely low intelligence, or severe personality or dexterity complications from entering the program. But most often the tests were utilized to corroborate that prospective clients did have the minimum requirements. This writer of course has no way of knowing what results would have been obtained if the clients who were eliminated by the tests had

gone to the Lighthouse and been included in the questionnaires.

This study showed that both sources of evaluations ascribed agreement between the Profile information and the respective validity criteria by indices of 1.52 or higher for all areas of information. Rehabilitation counselors' indices were generally higher with a mean index of 1.84. The Lighthouse staff had a mean index of 1.71 and a greater range. But no index went below 1.52. So for general purposes it can be said that both sources found agreement between test information and respective criteria by indices of well over 1.50 for all six areas.

However, the reliability of these mean indices is limited by relatively large standard deviations for within each area. Thus some positive agreement can be reliably assumed between test items and validity criteria; but the amount of such agreement can only be broadly indicated. However it could be generally assumed that the chances are about two out of three that the index for any area would be at least about +1.0. (For example, for area 1 of the staff, the mean of 1.52 could be assumed in two out of three cases to lie between 1.14 and 1.90; i.e. 1.52 $\pm$ .38.)

But the standard deviations for the mean total indices are relatively small, especially only .06 for the counselors. Thus it can be reasonably assumed that the index for any area will be relatively closely related to indices of the other areas. For example there are about two out of three chances that the mean index for counselors will be between 1.78 and

1.90. Naturally these assumptions are based on the subjects and test information in this study.

This study further showed that the respective rehabilitation counselors of 93 subjects thought the testing information made their counseling "much more helpful" to 87.1% of the subjects and "more helpful" to 11.6% of them. For all practical purposes, there was little difference among the areas of information so evaluated.

The counselors indicated that the test information about manual dexterities, personality, and vocational assessments made their counseling "neither more nor less helpful" for 2.0% of the subjects.

They thought the information about dexterities made their counseling "less helpful" to 1.1% of the 93 subjects. No other negative effects were ascribed to the test information.

The counselors thought that the amount of test information in all areas was "just right" for 96.9% of the 93 subjects. They thought "there should have been more of such information" in all areas for from 2.2% to 4.3% of the 93 subjects. They did not think there should have been less of any type of test information for any client.

Thus the counselors felt that the Profile information made their counseling more helpful to nearly all of their clients. They also felt that the information was adequate in nearly all cases and superfluous in none.

The Relationship of Counseling and Testing Services

The writer feels that the generally favorable evaluations of these services reflect, at least partly, the facilitating effects of coordinating all psychological services with each client's total rehabilitation program. This was largely accomplished through the already described staff conferences. Also very helpful was the generally cooperative relationship among agencies and personnel.

For example the judgments of helpfulness of the testing information by the rehabilitation counselors reflected the effects of conferences to explain the information. The Lighthouse staff's evaluations of the effects of counseling services depended upon their understanding these services in relation to each client; this was facilitated through the weekly "psychological staff conferences." The writer also found that knowing the testing information about clients enabled him to offer better counseling services. Also facilitating the effects of psychological services were the availability of related ophthalmological, medical, and social records from referral agencies. The writer required these for every client in the study.

The writer believes that the same psychological services might have been much less effective and helpful without the cooperative coordination in this study.

CHAPTER VII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The writer's objective was to set up as expeditiously as possible an effective program of psychological services, which he could conduct, to help adult "legally blind" clients at the Columbia Lighthouse for the Blind achieve as much as possible in their rehabilitation programs. These services included group, individual, and family counseling which were received by 60 blind clients during two years. The services also included a testing program, with a specially designed Psychological Profile form, utilized for 93 clients during the same two years. All services were cooperatively coordinated with each client's total rehabilitation program.

The problem in this study was to evaluate what good or harm the services did for the clients.

The "good" or "harm" evaluated for counseling services was in terms of its effect on specified items and areas of adjustment for each client. The "good" or "harm" evaluated for testing services was in terms of the agreement of 24 items of information in each client's Psychological Profile with previously established validity criteria.

There were three sources of evaluations in this study: the respective clients, the Columbia Lighthouse staff and their official records, and each client's respective Department of Vocational Rehabilitation counselor and his official records.

Counseling was evaluated by the respective clients, Lighthouse staff, and rehabilitation counselors, all evaluating the same factors of adjustment. Testing was evaluated by the Lighthouse staff and rehabilitation counselors, evaluating the same Profile information.

Background literature and previous research were presented as a framework for the counseling and evaluation procedures used in this study. Previous literature and research were also included as bases for using the tests, interpretation procedures, and evaluative designs for the testing services in this study.

Counseling services were evaluated, as they existed in the actual Lighthouse rehabilitation program, by the regularly used and professionally accepted evaluation procedures. Testing services were evaluated by comparisons with previously established, professionally accepted, and regularly used criteria.

Results of the study showed that the three sources of evaluations ascribed definite helpfulness, in all evaluated areas of adjustment, to the effects of counseling services received by the 60 subjects. However the amount of such help could not be determined with statistical reliability. But

statistical findings suggested that a client helped in one area of adjustment would probably be similarly helped in the other four areas of adjustment evaluated in the study.

The study showed no significant differences in the evaluations of counseling subjects when considered by sex. However there were some evidences that Negro clients thought they were helped more by counseling than did the white clients, especially in certain areas of adjustment.

Subjects with less vision thought they were helped more by counseling. There was inconclusive evidence that subjects with "motion perception" may be exceptions who are helped least because of special adjustment problems.

A majority of 35 subjects who evaluated the three counseling services said that group counseling helped the greatest number of adjustment items while individual counseling was the most valuable. However a large minority thought that group counseling was the most valuable. And 8% of the 60 subjects thought the counseling of their families was the most valuable service. None of the subjects indicated that counseling had no values for them.

Twenty-five clients given a choice of group and family counseling overwhelmingly picked their group as the most valuable and helpful. However this part of the study was considered to have very limited validity for several reasons. However it did show that these subjects also all ascribed value to some service and that 8% thought family counseling was most valuable.

Regarding the evaluation of testing services for 55 subjects.--The Lighthouse staff and rehabilitation counselors ascribed agreement between the Profile information and the respective validity criteria by indices of 1.52 (using a range of ± 2) or higher for all areas of information. Thus the testing information was generally congruous with the validity criteria of both sources. However the degree of agreement could only be generally ascertained because of the limited reliability of judgments within each area of information. However there was statistical reliability in assuming fairly similar agreement with the respective validity criteria among the six areas of information.

The vocational rehabilitation counselors indicated that having the test information made their counseling "much more helpful" to 87.1% and "more helpful" to 11.8% of their respective 93 clients. They indicated that it made counseling less helpful to only 1.1% of the 93 subjects.

The rehabilitation counselors also indicated that the amount of Profile information in each area was adequate for 96.9% of the 93 subjects and superfluous for none.

Conclusions

The following conclusions from this study warrant consideration:

1. The validity criteria utilized for these evaluations were far from perfect. However they seemed the best available and yielded important information.

2. The counseling services in this study were judged definitely helpful to the 60 subjects, to an approximately similar degree in the five areas of adjustment. However the amount of helpfulness could not be reliably determined.

3. The evaluations of counseling by subjects did not differ with sex. But there were evidences that the Negroes thought they were helped more than did the white clients, especially in certain adjustment areas.

4. Subjects with less vision thought they were helped more by counseling services. An exception with special problems may be clients with "motion perception."

5. It can be reasonably assumed that group and individual counseling will be found helpful by most blind rehabilitation clients similar to those in this study. A few will also find family counseling very important. None of the subjects indicated that counseling had no value. There was no evidence of major differences among areas of adjustment in the number of items helped by counseling. But it is likely that certain items of adjustment had greater importance for some clients than other items. It is also very possible that counseling services helped items of adjustment not included in the questionnaire.

6. Psychological Profile information for 53 subjects can be assumed to be in general agreement with both sources of validity criteria. However the amount of such agreement could not be reliably ascertained although it would probably be relatively similar for the six areas of information.

7. Rehabilitation counselors indicated that the testing information made their counseling "more helpful" to all but about 3% of their 93 clients. It made their counseling "less helpful," i.e. probably because of testing inaccuracy, to only 1.1% of the 93 subjects and the negative effect was only for the area of information concerning manual dexterities.

8. The rehabilitation counselors indicated that the amount of Profile information in each area was adequate for nearly all 93 subjects and was not superfluous for any of them.

9. The writer felt that the study indicated positive values for the cooperative coordination of all psychological services.

Recommendations for Future Studies

The following considerations are suggested for related further studies:

1. An important limitation in this study was the problem of evaluating the effects of counseling services on adjustment in a setting where other services also undoubtedly influenced adjustment. It is therefore suggested that similar counseling services for blind subjects be studied in settings where the client does not receive other services; for example, clients awaiting placement, or clients who already graduated from a rehabilitation program where counseling was not included. Under such conditions equated control groups and "before and after" evaluations could be considered. Also under such conditions evaluative tests of personal adjustment

could be utilized; such tests could not be used in this study because with no controls there would be no way to separate the influences of counseling from the influences of the other services.

2. A major restriction on the evaluation of testing services in this study was the fact that the Psychological Profiles of all 93 subjects were the work of this writer. There are no data about the same testing services conducted by someone else. Since the Profile information is actually the examiner's interpretation of testing results, it would seem of prime importance to evaluate Psychological Profiles by many examiners using the same tests and procedures with similar groups of blind subjects.

It would seem very desirable to arrange for such testing procedures in agencies for the blind in several geographical locations. In addition to evaluation information, the compilation of such data in one central place would be useful for further studies.

3. The literature contains many contentions that there is no special "psychology for the blind"; that counseling services which help the blind are not much different from services which could help anyone with a severe disability. It would therefore seem worthwhile to evaluate similar counseling services for rehabilitation subjects with other disabilities.

4. Any study can be improved by better control of influencing variables. In this study such variables were:

(a) There were different intervals between counseling services and evaluations of their effects. (b) There were different intervals between testing services and evaluations. The range in both these cases was nearly two years. (c) As already described, 35 of the 60 counseling subjects had unscheduled individual counseling and had to evaluate the "most valuable" service differently.

5. Evaluations of the effects of counseling services on the adjustment of blind subjects should be conducted with counselors other than the writer. A study similar to this might show different effects of counseling conducted by someone else.

6. It has already been noted that the Lighthouse services such as "travel training," shop, Braille and home economics probably affected clients' adjustments along with counseling services. However it might also be possible that the adjustments effected by counseling services improved clients' performances in these skills. An interesting study would be to:

a. Evaluate blind clients' performances in specified rehabilitation areas such as cane travel, shop, Braille, and orientation.

b. Allow a 10 week "wait" period during which no special services are received.

c. Evaluate the same performances a second time.

d. Provide a program of counseling services for 10 weeks.

e. Evaluate the same performances a third time.

f. An equated control group receiving equal attention but no counseling services could improve the validity of results.

This kind of study might supply information about the often considered possibility that the performance abilities of blind people can be helped by counseling services. In such studies it is highly desirable to have as large a number of subjects as possible.

APPENDIX A

QUESTIONNAIRES

CLIENTS' EVALUATIONS OF THE EFFECTS OF COUNSELING SERVICES

- DIRECTIONS -

"We would like you to help us make our counseling program as good as possible for future blind clients. You had three kinds of counseling services. You were in group counseling on Fridays, individual counseling on Wednesdays, and there were separate counseling groups for relatives on Fridays. What do you believe was the effect of these three counseling services on you concerning each of the following.

"As a result of counseling, do you now have much more, more, less, or much less:

(Sample items)

(A) Ability to understand the problems of others.

(B) Uneasiness when discussing blindness.

"Concerning this same thing, which was the most helpful counseling service, your Friday group, the Wednesday individual, or the Relatives' group?

"If you believe that the effect of counseling was neither more nor less, or if you do not know the effect, tell me so."

ITEMS FOR CLIENTS' COUNSELING QUESTIONNAIRE

1. Ability to ask a sighted stranger for needed aid, such as to cross a busy street.

2. Ability to ask a relative or close friend for needed aid, such as how clothing or grooming looks.

3. Unreasonable fear of using "travel" ability to travel alone.

4. General fear of things which are not really dangerous.

5. Tendency to blame blindness for personal failures which have nothing to do with vision.

6. Desire for unwarranted special treatment because of blindness

7. Feelings of depression.

8. Clearer vocational plans.

9. Knowledge of how to look for a job.

10. Desire to go for job interviews as soon as possible.

11. Worry that prospective employers may be unjustifiably prejudiced against hiring blind persons or that it is nearly impossible for a blind person to progress very far on a job.

12. Feelings of discomfort when eating in restaurants or someone else's home.

13. Ability to get along with fellow employees (or students).

14. Self-assessment in terms of a handicap rather than in terms of abilities.

15. Ability to understand the feelings of others.

16. General pessimism because of lost vision.

17. Exclusive seeking of blind companions or avoidance of sighted social groups.

18. Feeling that blindness is the worst thing that can happen to anyone.

19. Feelings of general nervousness.

20. Feeling that sighted people often cheat or take advantage of blind persons.

21. Sensitivity about blindness, such as feeling ill at ease when carrying the white cane.

22. Feelings of independence.

23. Feelings of self-respect.

24. Belief that you can be a valuable citizen in the community.

25. Ability to express and discuss your feelings.

---

26. Which of the (three) counseling services do you think was the most valuable for you?

COUNSELING DATA

FOR CLIENT #

Question No.	much more	more	neither more nor less	less	much less	I don't know	client's group	individual	relatives' group	none helped	I don't know
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											
21.											
22.											
23.											
24.											
25.											
26.											
27.	Yes					No					

REHABILITATION COUNSELOR'S AND COLUMBIA LIGHTHOUSE STAFF'S EVALUATIONS OF COUNSELING SERVICES FOR EACH CLIENT

"We would appreciate your help in the evaluation of our ten week counseling program for blind clients. Please indicate your opinion of the effect of the counseling services on

_____

for the following factors:"

(Note: "I will read a number of examples of the kinds of things we mean to include in each of these categories.")

- Lighthouse Staff's Evaluations -

	It helped greatly	It helped somewhat	It neither helped nor hindered	It hindered somewhat	It hindered greatly	I don't know
A. EMOTIONAL ADJUSTMENT						
B. SOCIAL ABILITIES						
C. UNWARRANTED FEARS, NERVOUSNESS, OR DEPRESSION						
D. ATTITUDES REGARDING HANDICAP(S)						
E. VOCATIONAL PREPARATION (attitudes, plans, goals, motivation, and action)						

- Rehabilitation Counselor's Evaluations

A. EMOTIONAL ADJUSTMENT						
B. SOCIAL ABILITIES						
C. UNWARRANTED FEARS, NERVOUSNESS, OR DEPRESSION						
D. ATTITUDES REGARDING HANDICAP(S)						
E. VOCATIONAL PREPARATION (attitudes, plans, goals, motivation, and action)						

[illegible]						
[illegible]						
[illegible]						
[illegible]						
[illegible]						

[illegible]						
[illegible]						
[illegible]						
[illegible]						
[illegible]						

[illegible]						
[illegible]						
[illegible]						
[illegible]						
[illegible]						

[illegible]

COLUMBIA LIGHTHOUSE STAFF'S EVALUATION OF TEST BATTERY INFORMATION

(A Comparison of Profile Factors with Final Reports)

"We would appreciate your help in the evaluation of our testing program. Please indicate the extent to which your final tenth week reports agree or disagree with _____'s Psychological Profile for the following factors:"

	greatly agrees	generally agrees	not comparable	generally disagrees	greatly disagrees	I don't know
1. General learning ability						
2. Knowledge of general information						
3. Situational and social reasoning ability						
4. Arithmetical ability						
5. Simple rote memory						
6. Complex rote memory						
7. Abstract and/or conceptual reasoning ability						
8. Verbal expressiveness						
9. General academic (school) level						
10. General learning of manual directions						
11. Workspace and workspot orientation ability						
12. Over-reliance on vision						
13. Tactual perception						
14. Use of tactual perception						
15. Tip of finger dexterity						
16. Bi-manual coordination						
17. Gross movements						
18. Use of a small tool						
19. Deftness with small objects & areas vs. large objects & areas						
20. General work habits						
21. General personality assessments (including prediction of any personality problems)						
22. Evaluation of client's vocational motivation						
23. Evaluation of practicality of client's vocational plans						
24. Recommendations for client's vocational goals						

REHABILITATION COUNSELOR'S EVALUATION

OF TEST BATTERY INFORMATION

"We would appreciate your evaluation of our testing services for blind clients. What is your opinion of having had the following information, contained in the Psychological Profile, in your counseling of _____?"

(Note: "I will read a number of examples of the kinds of things we mean to include in each of these categories.")

	1. GENERAL INTELLECTUAL ASSESSMENTS.	2. ACADEMIC ASSESSMENTS.	3. MANUAL DEXTERITY STRENGTHS & WEAKNESSES.	4. GENERAL PERSONALITY ASSESSMENTS.	5. VOCATIONAL ASSESSMENTS.	6. VOCATIONAL PREDICTIONS.	7. RECOMMENDATIONS.
The information was very true							
generally true							
(A) generally untrue							
very untrue							
I don't know.							
There should have been more of such information							
(B) less of such information							
The amount of such information was just right							
This information made counseling:							
much more helpful to the client							
more helpful to the client							
(C) neither more nor less helpful to the client							
less helpful to the client							
much less helpful to the client							
I don't know.							

APPENDIX B

DEFINITIONS

DEFINITIONS OF COUNSELING "AREAS OF ADJUSTMENT"

FOR REHABILITATION COUNSELORS AND COLUMBIA LIGHTHOUSE STAFF

A. EMOTIONAL ADJUSTMENT

1. Sensitivity about blindness, such as feeling ill at ease when carrying the white cane. (21)[1]
2. Feelings of independence. (22)
3. Feelings of self-respect. (23)
4. Belief that he (she) can be a valuable citizen in the community. (24)
5. Ability to express and discuss feelings. (25)

B. SOCIAL ABILITIES

1. Ability to ask a sighted stranger for needed aid, such as to cross a busy street. (1)
2. Ability to ask a relative or close friend for needed aid, such as how clothing or grooming looks. (2)
3. Feelings of discomfort when eating in restaurants or someone else's home. (12)
4. Exclusive seeking of blind companions or avoidance of sighted social groups. (17)
5. Ability to understand the feelings of others. (15)

C. UNWARRANTED FEARS, NERVOUSNESS, OR DEPRESSION

1. Unreasonable fear of using "travel" ability to travel alone. (3)
2. General fear of things which are not really dangerous. (4)
3. Feelings of depression. (7)
4. General pessimism because of lost vision. (16)
5. Feelings of general nervousness. (19)

D. ATTITUDES REGARDING HANDICAP(S)

1. Tendency to blame blindness for personal failures which have nothing to do with vision. (5)
2. Desire for unwarranted special treatment because of blindness. (6)
3. Self-assessment in terms of a handicap rather than in terms of abilities. (14)

---

[1]Numbers in parentheses refer to actual location of the item in the clients' questionnaire.

4. Feeling that blindness is the worst thing that can happen to anyone. (18)
5. Feeling that sighted people often cheat or take advantage of blind persons. (20)

E. VOCATIONAL PREPARATION (attitudes, plans, goals, motivation, and action)

1. Clearer vocational plans. (8)
2. Knowledge of how to look for a job. (9)
3. Desire to go for job interviews as soon as possible. (10)
4. Worry that prospective employers may be unjustifiably prejudiced against hiring blind persons or that it is nearly impossible for a blind person to progress very far on a job. (11)
5. Ability to get along with fellow employees (or students). (13)

DEFINITIONS OF TESTING "AREAS OF INFORMATION" FOR REHABILITATION COUNSELORS

I. GENERAL INTELLECTUAL ASSESSMENTS.

1. General learning ability
2. Knowledge of general information
3. Situational and social reasoning ability
4. Arithmetical ability
5. Simple rote memory
6. Complex rote memory
7. Abstract and/or conceptual reasoning ability
8. Verbal expressiveness

II. ACADEMIC ASSESSMENTS

9. General academic (school) level

III. MANUAL DEXTERITY STRENGTHS & WEAKNESSES

10. General learning of manual directions
11. Workspace and workspot orientation ability
12. Over-reliance on vision
13. Tactual perception
14. Use of tactual perception
15. Tip of finger dexterity
16. Bi-manual coordination
17. Gross movements
18. Use of a small tool
19. Deftness with small objects & areas versus large objects & areas
20. General work habits

IV. 21. GENERAL PERSONALITY ASSESSMENTS (including the prediction of personality problems)

V. VOCATIONAL ASSESSMENTS And VOCATIONAL PREDICTIONS

22. Evaluation of client's vocational motivation
23. Evaluation of practicality of client's vocational plans

VI. RECOMMENDATIONS

24. Recommendations for client's vocational goals

APPENDIX C

THE "PSYCHOLOGICAL PROFILE" FORM

Testing the Blind for Rehabilitation

Using a Psychological Profile

MARTIN DISHART

Reprinted from

The New Outlook for the Blind

Vol. 53, No. 1, January 1959

Testing the Blind for Rehabilitation

Using a Psychological Profile

MARTIN DISHART

This psychological testing program combines quantitative and qualitative evaluations of the testee. Inquiries about the Psychological Profile reproduced here, or the General Form for other disabilities, may be sent to the author at the Columbia Lighthouse for the Blind, 500 Ninth Street, S.W., Washington 24, D. C.

ANY TESTING PROGRAM must be designed to meet its ultimate objectives. The Psychological Profile presented here was designed to aid vocational rehabilitation counselors to maximally help their blind clients by fulfilling three testing needs: 1) Individual testing information; 2) Comparison with norms for the sighted; 3) A presentation form which the counselor can clearly understand.

1. Individual Testing Information

Rehabilitation testing should show not only what the client scored on each test but also *why* he scored as he did. Only individual testing can do this. An employer can afford to use group tests to screen out the best applicants for a job because he does not really care what happens to those who are unacceptable. But the rehabilitation counselor must maximally help *all* his clients. A little help in some direction—for example, a prosthesis, counseling, or special training—might enable the low-scoring testee to score much higher. Or, the high-scoring testee may have attained his high level by rushing so intensively that he would be unduly fatigued and unable to continue an actual job at the rate of speed shown by his test score. Both over-rating and under-rating are weaknesses which group testing is not apt to disclose. The vocational rehabilitation counselor cannot efficiently help his client by using testing tools which may have such weaknesses. Furthermore, the uncertainty of such testing inaccuracies is more dangerous because the counselor never knows where they exist; he may find out at the expense of his client and a dissatisfied employer. Therefore, in rehabilitation testing, quantitative scores must be supplemented by the testee's qualitative behavior.

Individual testing can also be used as a projective situation in which the client reveals how he sees himself and his environment and how he thinks the world sees him. This approach is especially im-

Mr. Dishart is rehabilitation psychologist for the Columbia Lighthouse for the Blind, Washington, D. C. He also does psychological evaluations for the Departments of Vocational Rehabilitation in the District of Columbia and Maryland and has done research in the advertising field.

portant in testing the blind* because they cannot validly be given most of the projective techniques which have been standardized only for the sighted. A blind testee cannot validly be given, for example, the Rorschach, Thematic Apperception Test, Figure Drawing, or Performance Scale of the Wechsler or WAIS tests, because approximately normal vision in both eyes is required.**

However, the psychologist or psychometrist administering this battery in a real sense lives with his client for the better part of a day. He can observe how the client behaves in enjoyed and disliked tasks, how he accepts or is upset by unsuccessful or frustrating performances, how he reacts toward the examiner and the testing situation. The blind person necessarily demonstrates his orientation and travel ability, his adjustment to an unfamiliar environment and situations, and his ability to ask for and accept help from other persons. Eating lunch, personal grooming, general cooperativeness and diligence, and asking for assistance can provide valuable information for a psychological evaluation. This can supplement and complement the objective information yielded by the tests to form a more complete psychological profile.

2. Norms for the Sighted

The blind person will have to compete with sighted people for jobs. Therefore the rehabilitation counselor should know how his blind client's scores compare with the test scores of sighted persons seeking the same kind of employment. For this reason, so-called "tests for the blind" are more misleading than enlightening since they compare the blind client's performances with those of other blind people.†

The tests included in this Psychological Profile are in general use for evaluating the sighted. The blind testee is tested and scored in the same way. However, he receives special instructions which enable him to demonstrate his maximal abilities. The "special instructions" in this battery have been standardized by the respective authors and publishers of the individual tests.* It cannot be too strongly emphasized that these "special instructions" must not be arbitrary ones. They should be sufficiently standardized by experts to (statistically) exclude the likelihood of their invalidating the results.

This battery was designed to meet certain informational needs of the vocational rehabilitation counselors and their blind clients in the District of Columbia. Included are four kinds of tests:

1. Intelligence (WAIS). A qualitative and quantitative evaluation.
2. Personality (Emotional Factors Inventory). This test is electronically timed and was taped by a professional actor.
3. Manual Dexterities. The major portion of the battery. These tests evaluate various manual abilities under different working conditions.
4. (School) Achievement. A minor portion of the battery.

3. The Presentation Form

The Psychological Profile consists of seven parts:

1. The mental, physical, personal, and vocational assets of the client.
2. The mental, physical, personal, and vocational liabilities of the client.
3. A Comparison Chart which graphic-

* *"Legally blind," i.e.,* 20/200, 20° *field, or less.*

** *Unfortunately some inexperenced or misinformed testers still attempt to administer these tests to legally blind clients with partial vision.*

† *However, such test norms can be valuable to help the psychologist who only occasionally has a blind client to better understand how groups of blind people compare with sighted people.*

* *This writer is deeply indebted to Dr. Nathaniel Raskin, formerly of the American Foundation for the Blind, Dr. Alexander Wesman of The Psychological Corporation, Dr. Mary K. Bauman of the Personnel Research Center, Dean William Harris of the Harris Institute, Dr. Jacob Rothschild of the Industrial Home for the Blind, and Mr. Arthur Anderson and Recording for the Blind Inc. for their invaluable help in designing this battery, and especially to Mr. J. Arthur Johnson and the Columbia Lighthouse for the Blind, who made this project possible.*

ally shows the client's relative strengths and weaknesses by his various test scores.* There is a Verbal Scale for the counselor without any knowledge of testing, a Percentile Scale for the counselor with a minimum of testing or statistical background, and a Standard Scale for the specially trained counselor or psychologist. The comparison lines for each test are automatically and simultaneously aligned for all tests.

4. An integration and interpretation of all the information. This section explains factors which may enhance or inhibit the client's performances as well as any possibilities to increase his employability.

5. Recommendations. These recommendations are for consideration by the client's counselor and may include anything pertinent to rehabilitation.

6. Appendix 1. This section contains details and technical information as well as the behavior of the client during each test.

7. Appendix 2. This consists of a booklet written for the rehabilitation counselor. It gives the references, norms, and other data for each test. Also it provides basic information about some of the things to do and, especially, not to do with test results.

At the time the Psychological Profile form was introduced, this writer held orientation conferences with the District of Columbia's Vocational Rehabilitation Service Counselors for the Blind. Their cooperation in these conferences enabled a better coordination with the psychological services and clarified many points for them which ultimately resulted in better use of the testing information. In addition, periodic case conferences can enhance testing as well as vocational rehabilitation services.

** Persons using this chart should be cautioned that any comparison of the scores on different tests must consider the norms of each test.*

An Illustration of the Psychological Profile

The Psychological Profile should not merely interpret and explain about the client. It should also attempt to utilize the testing information to help the client reach his maximal employability and successful rehabilitation.

Following is the Psychological Profile of an actual case with all identifying factors changed or removed. No case is really typical. This one is typical only in the sense that it is one of the multitude in which the vocational rehabilitation of a blind person involves many factors other than the loss of his vision.

Robert was tested in four areas: intelligence, emotional factors, manual dexterities, and school achievement. These were interrelated areas which overlapped, affected, and sometimes explained each other. An essential part of Robert's Profile were his statements, expressed feelings, and other behavior during testing. This behavior was a part of Robert, and therefore, a part of the testing situation. Blindness was only one facet of the Robert who had to be vocationally rehabilitated.

Note: The Psychological Profile on the following eleven pages is an exact reproduction, in reduced size, of an original presentation form supplied by the author. It should be noted that sections IV and V, which begin on page six, required additional space provided on the following page of the form; therefore, each of those two sections continues on page seven.

PSYCHOLOGICAL PROFILE

Client: X. Robert Address: 00 M St., Washington, D.C.
Sex: M X F __ Age: 19 yrs. Race: N Marital Status: S X M __ W __ D __ WY.8-0000
Education: 10th grade Lives: Alone __ Friends __ Relatives X
Major Occupations: Hospital Laundry 6 mo.; truck helper 3 mo.
Disabilities R=1/200,L=20/200(congenital)BUT better glasses could correct L to 20/100
SEE MEDICAL & OPHTHALMOLOGICAL REPORTS.
Date: October 1, 1958 Examiner: Martin Dishart
Martin Dishart

****

I. Assets:

A. Mental: He has a WAIS Verbal I.Q. of 84. He showed very good ability to learn and follow simple directions.

B. Physical: He seemed in good general health and capable of heavy work.

C. Personal: He was cooperative and worked diligently in spite of his frequent complaints.

D. Vocational: He has a realistic vocational aspiration to be a laundry worker. He held such a job for six months in a hospital.

II. Liabilities:

A. Mental: He showed great weakness in mental arithmetic, conceptual and abstract reasoning, vocabulary, and general information. He demonstrated a very low educational achievement level in spite of a 10th grade education; e.g. 2nd grade in spelling.

B. Physical: He strains his vision when using it definitively, especially with small parts.

C. Personal: His clothes were dirty and unkempt. He was late. His tests indicate, and he told about, interpersonal difficulties; e.g. with fellow employees. He tends to have a "chip-on-the-shoulder" attitude. He has poor social values and also racial prejudice which is probably a facade for his social insecurity.

D. Vocational: His vocational experiences consist of many short jobs held from one week to six months. He apparently had difficulties on many of them with his employer and/or fellow employees.

 - CONFIDENTIAL -

III. COMPARATIVE CHART OF ALL TESTS ADMINISTERED

(The client should NOT be told his test scores or percentiles.)

Scales: Verbal — Very Low | Low | Average | High | Very High

Standard: 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0

Percentile: 1 2 3 5 10 15 20 25 31 40 50 60 69 75 80 85 90 95 97 98 99

	Test Score	Std. Score	% ile
A. Intelligence Test:			
Wechsler Adult Intelligence Scale (WAIS) Verbal I.Q.	84	-	15
B. Personality Inventory:			
Emotional Factors Inventory (8 scales)			
1. Sensitivity	-	5.00	-
2. Somatic Symptoms	-	5.25	-
3. Social Competency	-	3.50	-
4. Paranoid Tendencies	-	3.17	-
5. Feelings of Inadequacy	-	4.25	-
6. Depression	-	3.25	-
7. Attitudes re: Blindness	-	4.25	-
8. Validation	-	6.00	-
C. Manual Dexterity Tests:			
1. Minnesota Rate of Manipulation			
a. Displacing Test (3 trials)	174	3.3	4.4
b. Turning Test (3 trials)	179	-2.6	-1
2. Pennsylvania Bi-Manual			
a. Assembly & throw in box	6'12"		
b. Assembly Test	5'14"	4.75	40
c. Disassembly	2'55"	4.50	31
3. Crawford Small Parts Dexterity Test Part II.	14'40"	-	-1
4. Purdue Pegboard Tests			
a. Right Hand (1 trial)	11	-	3
b. Left Hand (1 trial)	9	-	1
c. Both Hands (1 trial)	8	-	2
d. "R+L+B"	28	-	-1
e. Assembly (1 trial)	21	-	4
D. Achievement Test:			
Wide Range Achievement Test Spelling Grade	2.0th Grade	-	-
E. Other Tests:			

- CONFIDENTIAL -

IV. Integration and Interpretation of Test Results:

Robert X. achieved a WAIS Verbal I.Q. of 84 which is in the "Dull Normal" range. His most significant qualitative weakness, although not his lowest score, was shown on Similarities. Despite considerable effort, he lacked the conceptual thinking ability necessary to find essential likenesses (e.g. Dog-Lion: "Both have tails and walk on four legs and have hair."). His lowest score was for mental Arithmetic where he answered only two correctly and guessed wildly at all the rest. His poor responses on Information and Vocabulary showed poor acquisition of general information (e.g. He couldn't name four recent presidents and thought the average American woman is 5 ft. 9 in. tall). His highest scores were for Comprehension and the rote memory required for Digit Span. His relatively good capacity for immediate recall was further demonstrated by his ability to easily learn the directions for the manual dexterity tests and the Emotional Factors Inventory. But his relative weakness in more complex thinking and concentration was shown by his ability to repeat only 4 digits backward even though he did 7 forward. In spite of it being his highest quantitative score, his qualitative responses on Comprehension suggest a weak sense of social values which are further skewed by his tendency to see them in an egocentric light; i.e. his social values are filtered by their effect on him.

Although this client completed the 10th grade, and claimed an average grade of 80 to 90 with C in English and B in math, he could spell no further than the 2nd grade on the Wide Range Test. The validity of this score was further verified by his completely inappropriate wild guesses; e.g. dress = "gres", say = "saer", wall = "loan", arm = "lozam", train = "san", order = "roce", etc. He also responded extremely poorly on Vocabulary, Information, and especially Arithmetic of the WAIS (his arithmetic level is probably below the 5th grade).

Mr. X's main manual dexterity difficulty was over-reliance upon his inadequate definitive vision. It penalized him most where he had to work with both hands and couldn't see clearly what he was doing. Thus he scored below the first percentile on the Minnesota Turning Test because, from the required standing position, the work area was too far away. He also scored below the first percentile on the Crawford Test because he couldn't place his screwdriver in the slots of the tiny screws. In both cases he squinted and greatly strained his vision with resultant fatigue. On the Purdue Tests he intensively tried to rush. But his visual strain and poor workspot orientation caused clumsiness, poor bi-manual coordination, and a general lack of deftness. On the Minnesota Displacing Test he did better because the single hand task allowed him to turn his body sideways to better utilize his left eye. His best scores, in the "Average" range, were for the Pennsylvania Bi-Manual where the objects were large enough for him to see and the work area was at a distance within his focus. Thus, so far as his vision is concerned, his work task should not be too tiny or too far away.

In addition, the client is a rather clumsy, fumbling, erratic worker who lacks smoothness and works in spurts. He had poor to fair tip of finger dexterity and fair to good bi-manual coordination except with tiny objects where everything was poor. He

Check if continued on attached sheet (V)

V. Recommendations:

1. Follow ophthalmological recommendation for glasses to improve the vision of his left eye from 20/200 to 20/100. This would probably also improve his manual dexterity and reduce eyestrain.
2. Consider him for the laundry job he wants "more than anything else".
3. He would probably become bored with routine manual dexterity or assembly work. At such work he would do worst with tiny parts or a distant workspace. He would prefer heavy work.

Check if continued on attached sheet (V)

- CONFIDENTIAL -

X., Robert

IV. (Cont'd)

became easily fatigued on tasks which caused visual difficulties and complained profusely. He showed very poor ability to supplement his vision with his hands. However Mr. X. was very good at learning and following directions on all the tests. And in spite of his complaints he worked cooperatively and diligently.

It is highly recommended that the recommendation on Mr. X.'s ophthalmological report, dated 6/8/58, be followed. It prescribes glasses which will improve his vision from 20/200 to 20/100. His present glasses were given to him two years ago in a penal institution. He says they're useless and doesn't wear them. This examiner believes Mr. X.'s manual dexterity abilities might be considerably improved with better glasses. Also they might reduce the strain and fatigue factors which undoubtedly contributed to his dissatisfaction with the tasks. There are thus two approaches to reducing his workspot orientation handicap: correct glasses and instructions in the use of his fingers and tactual perception to supplement his vision.

Mr. X.'s Emotional Factors Inventory shows "high" Validation for his weaknesses on "Depression", "Paranoid Tendencies", and "Social Competency". The interview situation starkly revealed the same tendencies. Specifically: He was generally depressed and pessimistic regarding his employment possibilities because "a colored man always has trouble". He believed he lost his last job (after one week) because of the racial prejudice of his White employer. Yet, his own account clearly showed that he lost his job because his fellow Negro employees resented his "chip-on-the-shoulder" attitude and interpersonal behavior. After he told about several other jobs (all held for only short periods) he apparently realized the pattern. He then said that the thing that really bothered him at his last job was the way his fellow employees said "Yes Sir" to the White boss. He said that that was why he would have nothing to do with them, because "I don't take nothing from nobody". Thus he did lose his last job because of racial prejudice - his own. However this is just a reflection, from more basic feelings of insecurity, regarding his role within society. His two years in a penal institution for adolescents may have contributed to this social insecurity which in turn precipitates poor interpersonal relationships. But it probably had its origin much before that time (i.e. during childhood). It was reflected also on the WAIS Comprehension subtest.

The client came 25 minutes late, in dirty unkempt clothes but was not unclean himself. His first job choice is to work in a laundry. He held such a job for six months, his longest, and wants the same kind of work "more than anything else". His second choice is to be a stock boy or truck helper. Mr. X. also said he might like to finish high school in adult classes. He said he completed the 10th grade in a trade school. In view of his achievement test score, it is recommended that his counselor secure a transcript of his high school record.

V. (Cont'd)

4. A major employability problem may be his interpersonal behavior, especially with fellow employees. He may tend to have a "chip-on-the-shoulder" attitude and poor social values. He could probably benefit greatly from counseling (i.e. individual or group) at a therapeutic level.

APPENDIX 1. Results of Each Test and Client's Behavior During Each Test

Raw Scores and Scaled Scores

(X., Robert)

Wechsler Adult Intelligence Scale (WAIS)

Test	Raw Score	Scaled Score	(Age-Scaled Score)
Information	7	6	(6)
Comprehension	17	10	(10)
Arithmetic	4	4	(5)
Similarities	4	5	(6)
Digit Span	11	10	(10)
Vocabulary	18	6	(6)

Verbal Score 41 Verbal I.Q. 84

Significant Behavior of Client During Test: Although not his lowest score, the client's most significant qualitative weakness was in the conceptual thinking required for Similarities. Considerable effort couldn't locate desirable essential likenesses; e.g. Orange-Banana: "Both have skins on 'em." Dog-Lion: "Both have tails & walk on 4 legs & have hair." His lowest score was for mental Arithmetic where he guessed wildly at all his failures. His poor responses on Information and Vocabulary showed poor acquisition of general information; e.g. he couldn't name the 4 presidents & thought the average American woman is 5'9". He had mostly +1's & generally guessed at his failures on Vocabulary. His best scores were for Digit Span and Comprehension. He scored 7 Forward & 4 Backward on the former. His qualitative responses on Comprehension suggested a weak sense of social values and a tendency for such values to be rather egocentric.

Emotional Factors Inventory

Scale	Raw Score	T-Score
1. Sensitivity	10	5.00
2. Somatic Symptoms	3	5.25
3. Social Competency	17	3.50
4. Paranoid Tendencies	14	3.17
5. Feelings of Inadequacy	9	4.25
6. Depression	9	3.25
7. Attitude re: Blindness	13	4.25
8. Validation	2	6.00

Significant Behavior of Client During Test: He learned the directions quickly and easily.

(X., Robert)

Minnesota Rate of Manipulation

	Time in Seconds						Total Test Time	Std. Score	%ile Score
	Practice Trials			Test Trials					
Displacing Test	64	64	58	61	57	56	174	3.3	4.4
Trial No.	(1)	(2)	(3)	(4)	(5)	(6)			
Turning Test	67	59	67	57	61	61	179	under 2.6	under 1

Significant Behavior of Client During Test: He turned whole body sideways to better use left eye. He worked in spurts, erratically, and over-rushed with resultant clumsiness & fumbling. Poor tip of finger dexterity, fair gross dexterity. Some trouble with use of vision definitively in fitting blocks exactly into holes. Turning: Excellent at learning directions. Good bi-manual coordination. Main trouble was his over-reliance upon his inadequate definitive vision in fitting blocks into holes.

Pennsylvania Bi-Manual Worksample

	Time in Seconds		Standard Score	Percentile Score
	Trial 1 vs.	Trial 2		
Pre-Test	6' 12"			
Assembly Test	5' 14" *	6' 12"	4.75	40
Disassembly	2' 58"	2' 55" *	4.50	31

Significant Behavior of Client During Test: Some definitive vision difficulty when threading bolts. Fair tip of finger dexterity & bi-manual coordination. Good workspace orientation. He worked diligently and intensely but became bored with the task on the 2nd trial. He seemed helped by his ability to bring his eyes closer to the work area (i.e. which he could not do on the Minnesota because of the standing position).

Crawford Small Parts Dexterity Test

Time Score	Percentile Score
Part II. 7 ' 20" X 2 = 14 ' 40 "	under 1

Significant Behavior of Client During Test: Extreme difficulty because of over-reliance on inadequate definitive vision with resultant visual strain, undue fatigue, & exasperation with self. He frequently complained about the difficulty of the task & how much he disliked it. Very poor tip of finger dexterity & use of tool. The pieces & work area are too tiny for him. Poor bi-manual coordination because of visual & tip of finger ineptness. He did not use tactual perception or his fingers to help him improve his very poor workspot orientation.

(X., Robert)

Purdue Pegboard Test

Raw Scores

Sub-Test	Trial 1 vs.	Trial 2	Percentile Score
1. Right Hand	10	11 *	3
2. Left Hand	8	9 *	1
3. Both Hands	8	8 *	2
4. "R+L+B"		28	under 1
5. Assembly	21 *	20	4

Significant Behavior of Client During Test: 1. & 2.: Strained his vision squinting to find the holes definitively. Clumsy with the tiny pieces but rushed intensively. Both: Poor bi-manual coordination. Assembly: A very sloppy, clumsy, worker; he fumbled & scattered the pieces. He showed great visual strain & squinting He didn't like this task either and complained. But he learned & followed the directions very well. At no time did he use his tactual perception to help his workspot orientation.

Wide Range Achievement Test

Spelling Sub-Test

1 /	15 X	29 X	43	57	71	85	99
2 /	16 X	30 X	44	58	72	86	100
3 /	17 X	31 X	45	59	73	87	101
4 /	18 /	32	46	60	74	88	102
5 /	19 X	33	47	61	75	89	103
6 /	20 X	34	48	62	76	90	104
7 /	21 /	35	49	63	77	91	105
8 /	22 X	36	50	64	78	92	106
9 /	23 X	37	51	65	79	93	107
10 /	24 X	38	52	66	80	94	
11 /	25 X	39	53	67	81	95	
12 X	26 X	40	54	68	82	96	
13 /	27 X	41	55	69	83	97	
14 /	28 X	42	56	70	84	98	

Raw Score: 15 Spelling Grade: 2.0

Significant Behavior of Client During Test: Completely inappropriate and wild guesses; e.g. Dress = "gres", say = "saer", wall = "loan", arm = "lozam", train = "san", order = "roce".

APPENDIX 2. Explanation of the Psychological Purposes, Dynamics, and Norms for Each Test.

The following supplementary information was designed for the vocational rehabilitation counselor. It was not meant to substitute for the more specific and technical test manuals which may be obtained from the respective test publishers as indicated. You are invited to visit, telephone, or write to the psychologist at the Columbia Lighthouse to discuss any matters related to testing, counseling, or the individual client.

WECHSLER ADULT INTELLIGENCE SCALE (WAIS), VERBAL I.Q.

Author: David Wechsler

Publisher: Psychological Corp., New York, N.Y.

Adaptation for the Blind: By Martin Dishart using the general procedures developed by Mary K. Bauman and Samuel P. Hayes for use with the W-B Form I.

An "I.Q." is a comparative rating of an individual with others of his age. It compares his ability to perform certain standardized tasks requiring "intelligence" with the ability of the group upon which it was standardized to perform the same tasks.

In any general population it can be assumed that:

2.2 %	would	achieve	an	I.Q.	of	130 and above	and	be classified	"Very Superior"
6.7 "	"	"	"	"	"	120 - 129	"	" "	"Superior"
16.1 "	"	"	"	"	"	110 - 119	"	" "	"Bright Normal"
50.0 "	"	"	"	"	"	90 - 109	"	" "	"Average"
16.1 "	"	"	"	"	"	80 - 89	"	" "	"Dull Normal"
6.7 "	"	"	"	"	"	70 - 79	"	" "	"Borderline"
2.2 "	"	"	"	"	"	69 and below	"	" "	"Mental Defective"
100.0 %	(Total Population)								

Three additional factors are especially important:

1. I.Q.'s are more indicative and meaningful when they are near either extreme than when they are near "Average".

2. I.Q.'s are more useful as eliminative indicators than as suggestive indicators. For example, a person whose I.Q. is below a certain minimum level can be reasonably expected to do poorly or fail in college or professional school. However, no I.Q., no matter how high, can assure success in a school. Factors of personality, interests, motivation, special aptitudes, et cetera, also contribute to an individual's chance for success.

3. An I.Q., like any test score, is only one of many possible clues or indicators of an individual's potential. It can be a wonderfully useful clue or indicator. But no person, especially a handicapped person, should have his potential judged only by how he performed on a particular test on a particular day.

In addition to specific test scores, the client's psychological profile includes information based on the qualitative and quantitative relationships of his test performances. However, like test scores, the psychological profile is only one of many tools to be used appropriately by the counselor.

Norms:

Only the Verbal Scale was used because a legally blind person can not be tested on the Performance Scale according to the conditions under which it was standardized.

The WAIS is used in preference to the W-B Form I. because of its better standardization which was national and included Negroes proportionate to the 1950 Census. (The older W-B form was standardized largely on White persons in New York State.)

"Age-Scaled Scores" compare the individual's performance on each test with the performances of people in the same age group.

EMOTIONAL FACTORS INVENTORY

Author: Mary K. Bauman

Publisher: Personnel Research Center, Philadelphia, Pa.

Adaptation for the Blind: Recorded by Recording for the Blind, Inc., New York, N.Y., under the supervision of Martin Dishart following the general procedure used by Mary K. Bauman.

- Diagnostic Categories -

1. Sensitivity:

This scale was designed to indicate general neurotic tendencies, such as: general emotional instability, a tendency to worry, be fearful, easily upset, to brood over troubles, to cry easily, become excited easily, etc.

2. Somatic Symptoms:

This scale concerns health difficulties often associated with nervous tension and regarded as possibly psychic in origin or degree of severity. Items include fatigue without apparent cause, headaches, allergies, the pounding heart, stomach upsets, nightmares, etc. However, it is important to recognize that in some instances the items may represent organic difficulties not psychic in origin.

3. Social Competency and Interest in Social Contacts:

This scale attempts to reveal the individual's attitudes in social situations, and his willingness to seek social contacts as opposed to withdrawing from groups. It indicates his self-confidence in facing other people, his ease in talking with them, and willingness to play a leading part in the group.

4. Paranoid Tendencies:

This category seeks to uncover attitudes of suspicion and distrust toward others and their frequently accompanying attitudes of self-magnification, the notion that the individual is persecuted, has been unfairly treated, or his unwarrantable questioning of other people's sincerity or honesty.

5. Feelings of Inadequacy:

This category was designed to disclose feelings of inferiority, of inability to meet competition, especially as related to a physical handicap. Items show the individual's feeling of inability to solve his own problems, his feeling that he is not as good as or as capable as those around him, and distrust of his own decisions. These feelings may be related to a physical handicap although not necessarily to blindness.

6. Depression:

This scale is a measure of morale, of the client's hopefulness for his future, his belief that something good can still happen to him as opposed to low morale, hopelessness and the feeling that life is scarcely worth living.

7. Attitudes Toward Blindness:

This scale was designed to disclose the client's feelings about blindness in general, about himself as a blind person, and about the way in which he feels his family and community should react to him. Items include problems arising from blindness, such as running into things, asking help of strangers to find his way, asking the advice of seeing persons about his dress, preference for the company of blind persons, and general acceptance of the daily problems of blindness.

8. Validation:

Validity items were included to measure the individual's understanding of the inventory content and his frankness in responding to it.

Norms:

This is the only test printed in the profile chart which does not use the regular norms for sighted persons. The nature and purpose of this test required that it be standardized on blind persons. Therefore, the norms used are based on the performances of 200 male and female adults with vision ranging from total blindness through 20/200. (Prepared January, 1954 by the Personnel Research Center, Philadelphia, Pa., under the direction of Mary K. Bauman.)

(Note: New norms are available.)

MINNESOTA RATE OF MANIPULATION TEST

Publisher: Educational Test Bureau, Minneapolis, Minn.

Adaptation for the Blind: By John R. Roberts and Mary K. Bauman

The Minnesota Rate of Manipulation is a test of speed in gross finger, hand, and arm movements. However, psychologists have found functional involvements which include gross body movements, intelligence, spatial orientation, and perseverance. Personality factors may be revealed through impatience and the sacrifice of accuracy for speed. Clients with stable personalities will tend to perform consistently and improve gradually with each trial until a maximum level is reached.

The "Displacement" sub-test measures the speed of one-hand manipulation and accuracy of orientation in a workspace.

The "Turning" sub-test measures a speedy and smooth coordination of gross finger and hand movements of both hands.

Norms:

The distribution of scores on these motor skills tests for the general blind population is similar to, but significantly lower (roughly one Standard Deviation) than that for the general sighted population. However, since the distribution for the employed blind is practically the same as that for the general sighted population, the scores in this report are based on norms for sighted persons (i.e. since our blind clients are being considered for competitive employment).

PENNSYLVANIA BI-MANUAL WORKSAMPLE

Author: John R. Roberts

Publisher: Educational Test Bureau, Minneapolis, Minn.

Adaptation for the Blind: By John R. Roberts and Mary K. Bauman

The Pennsylvania Bi-Manual Worksample was developed as a standard job or task to predict manual dexterity on related manipulative tasks where speed is a factor. There are two sub-tests and one pre-test.

a.) Pre-test - (Subject assembles 80 bolts and nuts and throws them in a box.) This test is given to determine if a low score on "Assembly" is due to poor speed of coordination or poor orientation in the workspace. (i.e. A difference of more than two minutes and forty-four seconds between this and the Assembly sub-test indicates a problem in space orientation.)

b.) Assembly Test - This sub-test combines finger dexterity of both hands, gross movements of both arms, work space orientation, bi-manual coordination, and some degree of the individual's ability to use both hands in cooperation.

c.) Disassembly Test - This sub-test, when compared with Assembly Test scores, can be used to qualitatively reveal individuals who have considerable native speed but who experience difficulty in coordinating their two hands in order to execute the precise movements required in the Assembly Test; their scores will be higher on the less precise Disassembly Test.

Norms:

The distribution of scores on these motor skills tests for the general blind population is similar to, but significantly lower (roughly one Standard Deviation) than that for the general sighted population. However, since the distribution for the employed blind is practically the same as that for the general sighted population, the scores in this report are based on norms for sighted persons (i.e. since our blind clients are being considered for competitive employment). The norms used, from the test manual, are based on an "unselected" sampling of 3979 males and females whose ages range from 16 to 39.

CRAWFORD SMALL PARTS DEXTERITY TEST (Part II.)

Authors: John E. and Dorothea M. Crawford

Publisher: Psychological Corp., New York, N.Y.

Adaptation for the Blind: Mary K. Bauman

The subject starts small screws in threaded holes in a metal plate and screws them down with a screwdriver.

This test was designed to indicate dexterity in handling small parts with a tool in a small work space. Performance on this test may be expected to be related to success on jobs such as wiring intricate devices, radio tube manufacture, engraving and etching, and the assembly and adjustment of meters, clocks, watches, office machines, and other instruments. This is a "work-limit test"; that is, the subject completes the entire task and his score is the time required.

Norms:

The norms used are those presented by the publisher for sighted people. They are based on a standardization on 546 "unselected" male applicants in Pennsylvania and New Jersey guidance centers and 601 female applicants, between the ages of 18 and 40 years, for assembly jobs at a clock factory.

PURDUE PEGBOARD TESTS

Publisher: Science Research Associates, Chicago, Ill.

Adaptation for the Blind: Additional (not specified) time to examine and become familiar with the test materials.

The Purdue Pegboard is a test of manipulative dexterity designed to assist in the selection of employees for industrial jobs requiring manipulative dexterity, such as assembly, packing, operation of certain machines, and other routine manual jobs of an exacting nature. It provides separate measurements of the right hand, left hand, and both hands together, and measures dexterity for two types of activity: one involving gross movements of hand, fingers, and arms, and the other involving primarily what might be called "tip of the finger" dexterity needed in small assembly work.

Norms:

The best of two trials, after one practice trial, are scored on norms for sighted industrial applicants and/or veterans and college students as indicated for each client. The standardization group included 3304 men and 4530 women. (One trial norms were used because of their better standardization than those for three trials.)

WIDE RANGE ACHIEVEMENT TEST (Spelling Test)

Author and Publisher: Joseph Jastak

The client is asked to spell increasingly difficult words which he hears used in sentences. The words are designed to indicate his (school) spelling grade.

Norms:

The norms used are those for sighted persons. The test was standardized on 4052 students. Its correlation with the New Stanford Diction Test is +.93 (140 cases of the 7th and 8th grade).

500 9th Street, S.W.
Washington 24, D.C.

STerling 3-7922

COLUMBIA LIGHTHOUSE FOR THE BLIND

Evaluation and Adjustment Center

PSYCHOLOGICAL PROFILE OF: _____

This report is CONFIDENTIAL and should be read only by persons who are qualified and authorized.

- Contents -

- Appendix -

PSYCHOLOGICAL PROFILE

Client:_____ Address:_____

Sex: M__F__ Age:___yrs. Race:___ Marital Status: S__ M__ W__ D__

Education:_____ Lives: Alone__ Friends__ Relatives__

Major Occupations:_____

Disabilities:_____

Date:_____ Examiner:_____

****

I. Assets:

A. Mental:

B. Physical:

C. Personal:

D. Vocational:

II. Liabilities:

A. Mental:

B. Physical:

C. Personal:

D. Vocational:

III. COMPARATIVE CHART OF ALL TESTS ADMINISTERED

(The client should NOT be told his test scores or percentiles.)

	Test Score	Std. Score	% ile	Scales: Verbal — Very Low / Low / Average / High / Very High; Standard 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0; Percentile 1 2 3 5 10 15 20 25 31 40 50 60 69 75 80 85 90 95 97 98 99
A. Intelligence Test:				
Wechsler Adult Intelligence Scale (WAIS) Verbal I.Q.		-		
B. Personality Inventory:				
Emotional Factors Inventory (8 scales)				
1. Sensitivity	-		-	
2. Somatic Symptoms	-		-	
3. Social Competency	-		-	
4. Paranoid Tendencies	-		-	
5. Feelings of Inadequacy	-		-	
6. Depression	-		-	
7. Attitudes re: Blindness	-		-	
8. Validation	-		-	

C. Manual Dexterity Tests:			
1. Minnesota Rate of Manipulation			
a. Displacing Test (3 trials)			
b. Turning Test (3 trials)			
2. Pennsylvania Bi-Manual			
a. Assembly & throw in box			
b. Assembly Test			
c. Disassembly			
3. Crawford Small Parts Dexterity Test			
Part II.		-	
4. Perdue Pegboard Tests			
a. Right Hand (1 trial)		-	
b. Left Hand (1 trial)		-	
c. Both Hands (1 trial)		-	
d. "R+L+B"		-	
e. Assembly (1 trial)		-	
D. Achievement Test:			
Wide Range Achievement Test Spelling Grade	th Grade	-	-
E. Other Tests:			

IV. Integration and Interpretation of Test Results:

Check if continued on attached sheet ( )

V. Recommendations:

Check if continued on attached sheet ( )

APPENDIX 1. Results of Each Test and Client's Behavior During Each Test

Raw Scores and Scaled Scores

Wechsler Adult Intelligence Scale (WAIS)

Test	Raw Score	Scaled Score	(Age-Scaled Score)
Information			( )
Comprehension			( )
Arithmetic			( )
Similarities			( )
Digit Span			( )
Vocabulary			( )

Verbal Score _____ Verbal I.Q. _____

Significant Behavior of Client During Test:

Emotional Factors Inventory

Scale	Raw Score	T-Score
1. Sensitivity		
2. Somatic Symptoms		
3. Social Competency		
4. Paranoid Tendencies		
5. Feelings of Inadequacy		
6. Depression		
7. Attitude re: Blindness		
8. Validation		

Significant Behavior of Client During Test:

Minnesota Rate of Manipulation

	Time in Seconds						Total Test Time	Std. Score	%ile Score
	Practice Trials			Test Trials					
Displacing Test									
Trial No.	(1)	(2)	(3)	(4)	(5)	(6)			
Turning Test									

Significant Behavior of Client During Test:

Pennsylvania Bi-Manual Worksample

	Time in Seconds		Standard Score	Percentile Score
	Trial 1 vs.	Trial 2		
Pre-Test				
Assembly Test				
Disassembly				

Significant Behavior of Client During Test:

Crawford Small Parts Dexterity Test

Time Score	Percentile Score
Part II. ' " X 2 = ' "	

Significant Behavior of Client During Test:

Purdue Pegboard Test

Raw Scores

Sub-Test	Trial 1 vs.	Trial 2	Percentile Score
1. Right Hand			
2. Left Hand			
3. Both Hands			
4. "R+L+B"			
5. Assembly			

Significant Behavior of Client During Test:

Wide Range Achievement Test

Spelling Sub-Test

1____	15____	29____	43____	57____	71____	85____	99____
2____	16____	30____	44____	58____	72____	86____	100____
3____	17____	31____	45____	59____	73____	87____	101____
4____	18____	32____	46____	60____	74____	88____	102____
5____	19____	33____	47____	61____	75____	89____	103____
6____	20____	34____	48____	62____	76____	90____	104____
7____	21____	35____	49____	63____	77____	91____	105____
8____	22____	36____	50____	64____	78____	92____	106____
9____	23____	37____	51____	65____	79____	93____	107____
10____	24____	38____	52____	66____	80____	94____	
11____	25____	39____	53____	67____	81____	95____	
12____	26____	40____	54____	68____	82____	96____	
13____	27____	41____	55____	69____	83____	97____	
14____	28____	42____	56____	70____	84____	98____	

Raw Score:_____ Spelling Grade:_____

Significant Behavior of Client During Test:

APPENDIX 2. Explanation of the Psychological Purposes, Dynamics, and Norms for Each Test.

The following supplementary information was designed for the vocational rehabilitation counselor. It was not meant to substitute for the more specific and technical test manuals which may be obtained from the respective test publishers as indicated. You are invited to visit, telephone, or write to the psychologist at the Columbia Lighthouse to discuss any matters related to testing, counseling, or the individual client.

WECHSLER ADULT INTELLIGENCE SCALE (WAIS), VERBAL I.Q.

Author: David Wechsler

Publisher: Psychological Corp., New York, N.Y.

Adaptation for the Blind: By Martin Dishart using the general procedures developed by Mary K. Bauman and Samuel P. Hayes for use with the W-B Form I.

An "I.Q." is a comparative rating of an individual with others of his age. It compares his ability to perform certain standardized tasks requiring "intelligence" with the ability of the group upon which it was standardized to perform the same tasks.

In any general population it can be assumed that:

2.2 %	would	achieve	an	I.Q.	of	130 and above	and	be	classified	"Very Superior"
6.7 "	"	"	"	"	"	120 - 129	"	"	"	"Superior"
16.1 "	"	"	"	"	"	110 - 119	"	"	"	"Bright Normal"
50.0 "	"	"	"	"	"	90 - 109	"	"	"	"Average"
16.1 "	"	"	"	"	"	80 - 89	"	"	"	"Dull Normal"
6.7 "	"	"	"	"	"	70 - 79	"	"	"	"Borderline"
2.2 "	"	"	"	"	"	69 and below	"	"	"	"Mental Defective"
100.0 %	(Total Population)									

Three additional factors are especially important:

1. I.Q.'s are more indicative and meaningful when they are near either extreme than when they are near "Average".

2. I.Q.'s are more useful as eliminative indicators than as suggestive indicators. For example, a person whose I.Q. is below a certain minimum level can be reasonably expected to do poorly or fail in college or professional school. However, no I.Q., no matter how high, can assure success in a school. Factors of personality, interests, motivation, special aptitudes, et cetera, also contribute to an individual's chance for success.

3. An I.Q., like any test score, is only one of many possible clues or indicators of an individual's potential. It can be a wonderfully useful clue or indicator. But no person, especially a handicapped person, should have his potential judged only by how he performed on a particular test on a particular day.

In addition to specific test scores, the client's psychological profile includes information based on the qualitative and quantitative relationships of his test performances. However, like test scores, the psychological profile is only one of many tools to be used appropriately by the counselor.

Norms:

Only the Verbal Scale was used because a legally blind person can not be tested on the Performance Scale according to the conditions under which it was standardized.

The WAIS is used in preference to the W-B Form I. because of its better standardization which was national and included Negroes proportionate to the 1950 Census. (The older W-B form was standardized largely on White persons in New York State.)

"Age-Scaled Scores" compare the individual's performance on each test with the performances of people in the same age group.

EMOTIONAL FACTORS INVENTORY

Author: Mary K. Bauman

Publisher: Personnel Research Center, Philadelphia, Pa.

Adaptation for the Blind: Recorded by Recording for the Blind, Inc., New York, N.Y., under the supervision of Martin Dishart following the general procedure used by Mary K. Bauman.

- Diagnostic Categories -

1. Sensitivity:

This scale was designed to indicate general neurotic tendencies, such as: general emotional instability, a tendency to worry, be fearful, easily upset, to brood over troubles, to cry easily, become excited easily, etc.

2. Somatic Symptoms:

This scale concerns health difficulties often associated with nervous tension and regarded as possibly psychic in origin or degree of severity. Items include fatigue without apparent cause, headaches, allergies, the pounding heart, stomach upsets, nightmares, etc. However, it is important to recognize that in some instances the items may represent organic difficulties not psychic in origin.

3. Social Competency and Interest in Social Contacts:

This scale attempts to reveal the individual's attitudes in social situations, and his willingness to seek social contacts as opposed to withdrawing from groups. It indicates his self-confidence in facing other people, his ease in talking with them, and willingness to play a leading part in the group.

4. Paranoid Tendencies:

This category seeks to uncover attitudes of suspicion and distrust toward others and their frequently accompanying attitudes of self-magnification, the notion that the individual is persecuted, has been unfairly treated, or his unwarrantable questioning of other people's sincerity or honesty.

5. Feelings of Inadequacy:

This category was designed to disclose feelings of inferiority, of inability to meet competition, especially as related to a physical handicap. Items show the individual's feeling of inability to solve his own problems, his feeling that he is not as good as or as capable as those around him, and distrust of his own decisions. These feelings may be related to a physical handicap although not necessarily to blindness.

6. Depression:

This scale is a measure of morale, of the client's hopefulness for his future, his belief that something good can still happen to him as opposed to low morale, hopelessness and the feeling that life is scarcely worth living.

7. Attitudes Toward Blindness:

This scale was designed to disclose the client's feelings about blindness in general, about himself as a blind person, and about the way in which he feels his family and community should react to him. Items include problems arising from blindness, such as running into things, asking help of strangers to find his way, asking the advice of seeing persons about his dress, preference for the company of blind persons, and general acceptance of the daily problems of blindness.

8. Validation:

Validity items were included to measure the individual's understanding of the inventory content and his frankness in responding to it.

Norms:

This is the only test printed in the profile chart which does not use the regular norms for sighted persons. The nature and purpose of this test required that it be standardized on blind persons. Therefore, the norms used are based on the performances of 200 male and female adults with vision ranging from total blindness through 20/200. (Prepared January, 1954 by the Personnel Research Center, Philadelphia, Pa., under the direction of Mary K. Bauman.)

MINNESOTA RATE OF MANIPULATION TEST

Publisher: Educational Test Bureau, Minneapolis, Minn.

Adaptation for the Blind: By John R. Roberts and Mary K. Bauman

The Minnesota Rate of Manipulation is a test of speed in gross finger, hand, and arm movements. However, psychologists have found functional involvements which include gross body movements, intelligence, spatial orientation, and perseverance. Personality factors may be revealed through impatience and the sacrifice of accuracy for speed. Clients with stable personalities will tend to perform consistently and improve gradually with each trial until a maximum level is reached.

The "Displacement" sub-test measures the speed of one-hand manipulation and accuracy of orientation in a workspace.

The "Turning" sub-test measures a speedy and smooth coordination of gross finger and hand movements of both hands.

Norms:

The distribution of scores on these motor skills tests for the general blind population is similar to, but significantly lower (roughly one Standard Deviation) than that for the general sighted population. However, since the distribution for the employed blind is practically the same as that for the general sighted population, the scores in this report are based on norms for sighted persons (i.e. since our blind clients are being considered for competitive employment).

PENNSYLVANIA BI-MANUAL WORKSAMPLE

Author: John R. Roberts

Publisher: Educational Test Bureau, Minneapolis, Minn.

Adaptation for the Blind: By John R. Roberts and Mary K. Bauman

The Pennsylvania Bi-Manual Worksample was developed as a standard job or task to predict manual dexterity on related manipulative tasks where speed is a factor. There are two sub-tests and one pre-test.

a.) Pre-test - (Subject assembles 80 bolts and nuts and throws them in a box.) This test is given to determine if a low score on "Assembly" is due to poor speed of coordination or poor orientation in the workspace. (i.e. A difference of more than two minutes and forty-four seconds between this and the Assembly sub-test indicates a problem in space orientation.)

b.) Assembly Test - This sub-test combines finger dexterity of both hands, gross movements of both arms, work space orientation, bi-manual coordination, and some degree of the individual's ability to use both hands in cooperation.

c.) Disassembly Test - This sub-test, when compared with Assembly Test scores, can be used to qualitatively reveal individuals who have considerable native speed but who experience difficulty in coordinating their two hands in order to execute the precise movements required in the Assembly Test; their scores will be higher on the less precise Disassembly Test.

Norms:

The distribution of scores on these motor skills tests for the general blind population is similar to, but significantly lower (roughly one Standard Deviation) than that for the general sighted population. However, since the distribution for the employed blind is practically the same as that for the general sighted population, the scores in this report are based on norms for sighted persons (i.e. since our blind clients are being considered for competitive employment). The norms used, from the test manual, are based on an "unselected" sampling of 3979 males and females whose ages range from 16 to 39.

CRAWFORD SMALL PARTS DEXTERITY TEST (Part II.)

Authors: John E. and Dorothea M. Crawford

Publisher: Psychological Corp., New York, N.Y.

Adaptation for the Blind: Mary K. Bauman

The subject starts small screws in threaded holes in a metal plate and screws them down with a screwdriver.

This test was designed to indicate dexterity in handling small parts with a tool in a small work space. Performance on this test may be expected to be related to success on jobs such as wiring intricate devices, radio tube manufacture, engraving and etching, and the assembly and adjustment of meters, clocks, watches, office machines, and other instruments. This is a "work-limit test"; that is, the subject completes the entire task and his score is the time required.

Norms:

The norms used are those presented by the publisher for sighted people. They are based on a standardization on 546 "unselected" male applicants in Pennsylvania and New Jersey guidance centers and 601 female applicants, between the ages of 18 and 40 years, for assembly jobs at a clock factory.

PURDUE PEGBOARD TESTS

Publisher: Science Research Associates, Chicago, Ill.

Adaptation for the Blind: Additional (not specified) time to examine and become familiar with the test materials.

The Purdue Pegboard is a test of manipulative dexterity designed to assist in the selection of employees for industrial jobs requiring manipulative dexterity, such as assembly, packing, operation of certain machines, and other routine manual jobs of an exacting nature. It provides separate measurements of the right hand, left hand, and both hands together, and measures dexterity for two types of activity: one involving gross movements of hand, fingers, and arms, and the other involving primarily what might be called "tip of the finger" dexterity needed in small assembly work.

Norms:

The best of two trials, after one practice trial, are scored on norms for sighted industrial applicants and/or veterans and college students as indicated for each client. The standardization group included 3304 men and 4530 women. (One trial norms were used because of their better standardization than those for three trials.)

WIDE RANGE ACHIEVEMENT TEST (Spelling Test)

Author and Publisher: Joseph Jastak

The client is asked to spell increasingly difficult words which he hears used in sentences. The words are designed to indicate his (school) spelling grade.

Norms:

The norms used are those for sighted persons. The test was standardized on 4052 students. Its correlation with the New Stanford Diction Test is +.93 (140 cases of the 7th and 8th grade).

BIBLIOGRAPHY

Books

Bach, George R. Intensive Group Psychotherapy. New York: Ronald Press, 1954.

Bauman, Mary K. Adjustment to Blindness. Harrisburg, Pa.: State Council for the Blind, Commonwealth of Pennsylvania, 1954.

———, A Manual of Norms for Tests Used in Counseling Blind Persons. New York: American Foundation for the Blind, 1958.

Bauman, Mary K., and Hayes, Samuel P. A Manual for the Psychological Examination of the Adult Blind. New York: Psychological Corp., 1951.

Bennett, Margaret E. Guidance in Groups. New York: McGraw-Hill, 1955.

Cholden, Louis S. A Psychiatrist Works With Blindness. New York: American Foundation for the Blind, 1958.

Crawford, John E. and Dorothea M. Crawford Small Parts Dexterity Test. New York: Psychological Corp., 1956.

DiMichael, Salvatore G. Psychological Services in Vocational Rehabilitation. Washington, D.C.: Department of HEW, Office of Vocational Rehabilitation, 1959.

Driver, Helen I. Counseling and Learning Through Small-Group Discussion. Madison, Wisconsin: Monona Publications, 1958.

Erickson, Clifford E. The Counseling Interview. New York: Prentice-Hall, 1950.

Educational Test Bureau. Minnesota Rate of Manipulation Test, Examiner's Manual. Minneapolis: Educational Test Bureau, Educational Publications, Inc., 1946.

Foulkes, S. H., and Anthony, E. J. Group Psychotherapy. London: Penguin Books, Ltd., 1957.

Garrett, Annette. Interviewing: Its Principles and Methods. New York: Family Welfare Association of America, 1942.

Gowman, Alan G. The War Blind in American Social Structure. New York: American Foundation for the Blind, 1957.

Hahn, Milton E., and MacLean, Malcolm S. General Clinical Counseling in Educational Institutions. New York: McGraw-Hill, 1950.

---------. Counseling Psychology. New York: McGraw-Hill, 1955.

Hamilton, Kenneth W. Counseling the Handicapped in the Rehabilitation Process. New York: Ronald Press, 1950.

Hoppock, Robert. Group Guidance Principles, Techniques, and Evaluation. New York: McGraw-Hill, 1949.

---------. Occupational Information. New York: McGraw-Hill, 1957.

Jastak, Joseph. Wide Range Achievement Test (Spelling). Wilmington, Delaware: Chas. L. Story Co., 1946.

Kessler, Henry H. Rehabilitation of the Physically Handicapped. New York: Columbia University Press, 1953.

Lehner, George F., and Kube, Ella. The Dynamics of Personal Adjustment. Englewood Cliffs, N.J.: Prentice-Hall, 1955.

Lowenfeld, Berthold. "The Blind," Psychological Aspects of Blindness. Rehabilitation Service Series No. 210. Washington, D.C.: Department of HEW, Office of Vocational Rehabilitation, 1953, pp. 179-93.

Patterson, C. H. Counseling the Emotionally Disturbed. New York: Harper, 1958.

---------. Counseling and Psychotherapy: Theory and Practice. New York: Harper & Bros., 1959.

Pepinsky, Harold B. and Pauline N. Counseling Theory and Practice. New York: Ronald Press, 1954.

Pintner, Rudolf, Eisenson, Jon, and Stanton, Mildred. The Psychology of the Physically Handicapped. New York: Crofts & Co., 1941. Chapter VII, "The Blind," pp. 207-251.

Purdue Research Foundation. Examiner Manual for the Purdue Pegboard. Chicago: Science Research Associates, 1948.

Roberts, John P., and Bauman, Mary K. Motor Skills Tests Adapted to the Blind, Minnesota Rate of Manipulation Test; Pennsylvania Bi-Manual Worksample. Minneapolis: Educational Test Bureau, Educational Publishers, Inc., 1944.

Roberts, John H. Pennsylvania Bi-Manual Worksample, Examiner's Manual. Minneapolis: Educational Test Bureau, Educational Publishers, Inc., 1945.

Slavson, S. R. An Introduction to Group Therapy. New York: The Commonwealth Fund, 1943.

---------. The Practice of Group Therapy. New York: International Universities Press, 1947.

---------. Child-Centered Group Guidance of Parents. New York: International Universities Press, 1958.

Tyler, Leona E. The Work of the Counselor. New York: Appleton-Century, Crofts, 1953.

Wechsler, David. Manual for the Wechsler Adult Intelligence Scale. New York: Psychological Corp., 1955.

---------. The Measurement and Appraisal of Adult Intelligence. 4th ed. Baltimore: Williams and Wilkins Co., 1958.

Articles and Periodicals

Ammons, Carol H., Worchel, Philip, and Dallenbach, Karl M. "'Facial Vision': the Perception of Obstacles Out of Doors by Blindfolded and Blindfolded-deafened Subjects," American Journal of Psychology, Vol. 66, No. 4 (October, 1953), pp. 519-53.

Ballard, Robert G., and Mudd, Emily H. "Some Theoretical and Practical Problems in Evaluating Effectiveness of Counseling," Social Casework, Vol. 38, No. 10 (December, 1957), pp. 533-38.

---------. "Some Sources of Difference Between Client and Agency Evaluation of Effectiveness of Counseling," Social Casework, Vol. 39, No. 1 (January, 1958), pp. 30-35.

Bauman, Mary K. "A Measure of Personality Change Thru Adjustment Training," New Outlook for the Blind, Vol. 48, No. 2 (February, 1954), pp. 31-34.

---------. "The Initial Psychological Reaction to Blindness," New Outlook for the Blind, Vol. 53, No. 5 (May, 1959), pp. 165-69.

Blank, H. Robert. "Psychoanalysis and Blindness," Psychoanalytic Quarterly, Vol. 26, No. 1 (January, 1957), pp. 1-24.

Block, William E. "Operational Principles for Counseling the Disabled," Journal of Counseling Psychology, Vol. 2, No. 4 (Winter, 1955), pp. 256-63.

Boutonier, J. and Henri P. "La Peur et l'angoisse chez les enfants et les adolescents aveugles" (Fear and Anxiety in Blind Children and Adolescents), Journal de Psychologie, Vol. 39 (July-September, 1946), pp. 341-49.

Chevigny, Hector. "The Adjustment of the Blind," Transactions of the New York Academy of Sciences, Series II, Vol. 13, No. 6 (April, 1951), pp. 233-38.

Cholden, Louis. "Group Therapy with the Blind," Group Psychotherapy, Vol. 6, No. 1-2 (May-August, 1953), pp. 21-25.

Conrad, Gertrude J. "Development of a Group Counseling Program in a Family Service Agency," Social Casework, Vol. 39, No. 10 (December, 1958), pp. 560-64.

Curtis, James W. "Administration of the Purdue Pegboard Test to Blind Individuals," Educational and Psychological Measurements, Vol. 10 (1950), pp. 329-31.

Cutsforth, Thomas D. "Personality and Social Adjustment Among the Blind," Blindness. Ed. Paul A. Zahl. New Jersey: Princeton University Press, 1950. Chapter 11, pp. 174-187.

Dabelstein, Donald H. "Vocational Rehabilitation of the Blind," Blindness. Ed. Paul A. Zahl. New Jersey: Princeton University Press, 1950. Chapter 12, pp. 191-205.

---------. "Vocational Diagnosis and Counseling," Proceedings of the 21st Convention, American Association of Workers for the Blind. New York: American Association of Workers for the Blind, 1947.

DiMichael, Salvatore G. "Vocational Counseling of the Adult Blind," Psychological Diagnosis and Counseling of the Adult Blind. Proceedings of the University of Michigan Conference for the Blind, 1947. New York: American Foundation for the Blind, 1950. Chapter 11, pp. 137-63.

Dishart, Martin. "Testing the Blind for Rehabilitation Using a Psychological Profile," New Outlook for the Blind, Vol. 52, No. 1 (January, 1958), pp. 1-14.

Donahue, Wilma. "Needs and Developments in Psychological Research for the Blind," Psychological Diagnosis and Counseling of the Adult Blind. Proceedings of the University of Michigan Conference for the Blind, 1947. New York: American Foundation for the Blind, 1950. Chapter 12, pp. 154-69.

Dover, Frances T. "Readjusting to the Onset of Blindness," Social Casework, Vol. 40, No. 6 (June, 1959), pp. 334-38.

Dreese, Mitchell. "Group Guidance and Group Therapy," Review of Educational Research, Vol. 27, No. 2 (April, 1957), pp. 219-28.

Dressel, Paul L. "Some Approaches to Evaluation," in "Research in Counseling: A Symposium," Personnel and Guidance Journal, Vol. 31, No. 5 (February, 1953), pp. 284-87.

Faries, Miriam. "Hostility in Short-Term Counseling," Personnel and Guidance Journal, Vol. 36, No. 9 (May, 1958), pp. 627-28.

Fiske, Marjorie. "Blindness a Psychological Problem," Teachers Forum, Vol. 9 (1937), pp. 47-55, 59.

Fletcher, Frank M. "Symposium on Rehabilitation Counseling: the Role of Counseling Psychology in Rehabilitation," Journal of Counseling Psychology, Vol. 1, No. 4 (Winter, 1954), pp. 240-43.

Fries, Emil. "The Social Psychology of Blindness," Journal of Abnormal and Social Psychology, Vol. 25, No. 1 (April-June, 1930).

Froelich, Clifford P. "Toward More Adequate Criteria of Counseling Effectiveness," Educational and Psychological Measurement, Vol. 9, No. 3 (Autumn, 1949), pp. 355-67.

Grater, Harry A. "When Counseling Success is Failure," Personnel and Guidance Journal, Vol. 37, No. 3 (November, 1958), pp. 223-25.

Hadley, John M. "Group Counseling and Therapy," Clinical and Counseling Psychology. New York: Alfred Knopf, 1958. Chapter 10, pp. 227-48.

Harris, William H. "A Bas Relief Projective Technique," Journal of Psychology, Vol. 26 (1948), pp. 3-17.

Hever, Vivian M. "Group Counseling, Individual Counseling, and a College Class in Vocations," Personnel and Guidance Journal, Vol. 37, No. 9 (May, 1959), pp. 660-65.

Himes, Joseph S. "Changing Attitudes of the Public toward the Blind," New Outlook for the Blind, Vol. 52, No. 9 (November, 1958), pp. 330-35.

Hobbs, Nicholas. "Group-Centered Psychotherapy," Client-Centered Therapy. Boston: Houghton Mifflin Co., 1951.

Hoffman, Simon. "Some Predictors of the Manual Work Success of Blind Persons," Personnel and Guidance Journal, Vol. 36, No. 8 (April, 1958), pp. 542-44.

Jacobs, Abraham. "Vocational Rehabilitation of the Blind," New Outlook for the Blind, Vol. 51, No. 7 (September, 1957), pp. 226-92.

Johnson, J. Arthur, and Dishart, Martin. "Letting the Client Judge," New Outlook for the Blind, Vol. 52, No. 3 (March, 1958), pp. 75-77.

Kaufman, Charles M. "The Personal-Social, Educational and Vocational Adjustment of Blinded Veterans of World War II," Dissertation Abstracts, Vol. 16, pp. 1400-1401. New York: New York University, 1956.

Lokshin, Helen. "Psychological Factors in Casework with Blind Older Persons," New Outlook for the Blind, Vol. 51, No. 1 (January, 1957), pp. 1-8.

MacFarland, Douglas C. "The Importance of Family Attitudes in Vocational Rehabilitation," New Outlook for the Blind, Vol. 51, No. 10 (December, 1957), pp. 443-45.

Marra, Joseph L., and Novis, Frederick W. "Family Problems in Rehabilitation Counseling," Personnel and Guidance Journal, Vol. 38, No. 1 (September, 1959), pp. 40-42.

Masterman, Louis E. "Some Psychological Aspects of Rehabilitation," Journal of Rehabilitation, Vol. 24, No. 4 (July-August, 1958), pp. 4-6.

Menninger, William C. "The Relationship of Clinical Psychology and Psychiatry," American Psychologist, Vol. 5 (January, 1950), pp. 3-15.

Mishchenko, M. N. "Peculiarities of Voluntary Movements of the Facial Muscles of Blind People," Sovetskaia Neuropatologia, No. 7 (1935), pp. 121-32.

Mittelmann, Bela. "Simultaneous Treatment of Both Parents and their Child," Specialized Techniques in Psychotherapy. Ed. Gustav Bychowski. New York: Grove Press, 1952.

Morris, Woodrow W. "A Survey of Projective Techniques for Use with the Adult Blind," Psychological Diagnosis and Counseling of the Adult Blind. Proceedings of the University of Michigan Conference for the Blind, 1947. New York: American Foundation for the Blind, 1950. Chapter 9, pp. 114-29.

O'Dea, J. David, and Zeran, Franklin R. "Evaluating Effects of Counseling," Personnel and Guidance Journal, Vol. 31, No. 4 (January, 1953), pp. 241-44.

Pepinsky, Harold B. "Some Proposals for Research," in "Research in Counseling: A Symposium," Personnel and Guidance Journal, Vol. 31, No. 5 (February, 1953), pp. 291-94.

Pawls, Horace D. "Cultural Factors in Disability," New Outlook for the Blind, Vol. 51, No. 3 (March, 1957), pp. 87-92.

Reid, Eleanor S. "Helping Parents of Handicapped Children," New Outlook for the Blind, Vol. 53, No. 4 (April, 1959), pp. 123-25.

Rogers, Carl. "The Characteristics of a Helping Relationship," Personnel and Guidance Journal, Vol. 37, No. 1 (September, 1958), pp. 6-16.

Rothschild, Jacob. "A Battery of Psychological Tests in Rehabilitation Services," New Outlook for the Blind, Vol. 53, No. 7 (September, 1959), pp. 249-51.

Routh, Thomas A. "Counseling the Blind," Outlook for the Blind, Vol. 42, No. 10 (December, 1948), pp. 295-99.

--------, "Body Image in Counseling the Handicapped," Vocational Guidance Quarterly, Vol. 7, No. 2 (Winter, 1958-59), pp. 127-30.

Routh, Thomas A. "Adjustment Counseling," American Journal of Occupational Therapy, Vol. 11, No. 6 (November-December, 1957), pp. 320-21, 337, 338.

"St. Paul's Rehabilitation Center for the Blind," Journal of Rehabilitation, Vol. 25, No. 5 (September-October, 1959), pp. 16-18.

Shoben, Edward J. Jr. "Some Problems in Establishing Criteria of Effectiveness," in "Research in Counseling: A Symposium," Personnel and Guidance Journal, Vol. 31, No. 5 (February, 1953), pp. 287-91.

Spotnitz, Hyman. "Group Therapy as a Specialized Psychotherapeutic Technique," Specialized Techniques in Psychotherapy. Ed. Gustav Bychowski. New York: Grove Press, 1952.

Stephens, Robert B. "Psychological Testing of the Blind," Proceedings of the 24th Convention, American Association of Workers for the Blind. New York: American Association of Workers for the Blind, July, 1950, pp. 115-18.

Voorhees, Arthur L. "Counseling the Blind," Vocational Guidance Quarterly, Vol. 3, No. 2 (Winter, 1954-55), pp. 55-57.

---------. "Attitudes of the Blind toward Blindness," Proceedings of the 23rd Convention, American Association of Workers for the Blind. New York: American Association of Workers for the Blind, July, 1949, pp. 65-67.

Williams, Russell C., and Flank, Maxwell D. "Therapy for the Newly Blinded, as Practiced with Veterans," Journal of the American Medical Association, Vol. 158 (July 9, 1955), pp. 811-15.

Wilson, J. F. "Adjustments to Blindness," British Journal of Psychology, Vol. 38 (1948), pp. 212-26.

Witters, Frederich. "Psychotherapie in der Bildungsarbeit an blinden, sehbehinderten und sehgefährdeten Kindern," Der Blindenfreund, Vol. 71, No. 6 (November-December, 1951), pp. 163-65.

Wright, Wayne E. "Multiple Counseling: Why? When? How?" Personnel and Guidance Journal, Vol. 37, No. 8 (April, 1959), pp. 551-57.

Reports and Other Sources

Adjustment and Prevocational Training for the Blind. A Symposium at the Conference of State Workers for the Blind, Pottsville, Pennsylvania. Rehabilitation Service Series No. 88. Washington, D.C.: Federal Security Agency, Office of Vocational Rehabilitation, March, 1949.

Bauman, Mary K. "A Comparative Study of Personality Factors in Blind, Other-Handicapped, and Non-Handicapped Individuals," Rehabilitation Service Series No. 134. Washington, D.C.: Office of Vocational Rehabilitation, 1950. (Mimeographed, 7 pp.)

———. "A Comparative Study of Personality Factors in Blind, Other-Handicapped, and Non-Handicapped Individuals." A study prepared for the Personnel Research Center, Philadelphia, 1950. (Mimeographed.)

DiMichael, Salvatore G. Psychological Tests for Use with Blind Adults in Vocational Rehabilitation. Rehabilitation Service Series No. 25. Washington, D.C.: Federal Security Agency, Office of Vocational Rehabilitation, May 1, 1947.

Dishart, Martin. Psychological Profile Form for the Blind. Washington, D.C.: by the author, 1958. 12 pp.

Fitting, Edward A. Evaluation of Adjustment to Blindness. Research Series No. 2. New York: American Foundation for the Blind, 1954.

MacFarland, Douglas C. A Study of Work Efficiency of Blind and Sighted Workers in Industry. Research Series No. 3. New York: American Foundation for the Blind, 1950.

National Psychological Research Council for the Blind. Research Suggestions on Psychological Problems Associated with Blindness. Washington, D.C.: Federal Security Agency, Office of Vocational Rehabilitation, 1951.

Redkey, Henry. Rehabilitation Centers Today. Rehabilitation Service Series No. 490. Washington, D.C.: Office of Vocational Rehabilitation, 1959.

Seashore, Harold, Director Test Division, Psychological Corp. Letter dated November 27, 1959.

Shurrager, Harriett C. Performance Scale for the Adult Blind. Chicago: Psychology Research, 1953.

"Statistical Tables of a Survey of the Community Services and Facilities Available to the Blind Residents of Washington, D. C., Montgomery County, Md. and Prince Georges County, Md." American Foundation for the Blind, April, 1950.

Thomason, Bruce, and Barrett, Albert M. Casework Performance in Vocational Rehabilitation. Rehabilitation Service Series No. 505. Washington, D.C.: Department of HEW, Office of Vocational Rehabilitation, May, 1960.

U. S., Congress. "Vocational Rehabilitation Amendments of 1954." Public Law 565, 83rd Congress.